UNITED STATES DISTRICT COURT

for the

Western District of Washington

In the Matter of the Search of	
(Briefly describe the property to be searched) or identify the person by name and address)	Care No. 1 Mag. 100
(1) Information associated with 36 Google accounts that is	Case No. MJ22-129
stored at premises controlled by Google LLC; and	
(2) Information associated with 2 Apple accounts that is stored at premises controlled by Apple Inc.	
APPLICATION FOR A	SEARCH WARRANT
La fadaral law anforcement officer or an attorney for	r the government, request a search warrant and state under
penalty of perjury that I have reason to believe that on the foll property to be searched and give its location):	lowing person or property (identify the person or describe the
See Attachments A-1 and A-2, incorporated herein by reference.	
located in theNorthernDistrict of	California , there is now concealed (identify the
person or describe the property to be seized):	
See Attachments B-1 and B-2, incorporated herein by reference.	
The basis for the search under Fed. R. Crim. P. 41(c)	is (check one or more):
vidence of a crime;	
contraband, fruits of crime, or other items ill	egally possessed;
property designed for use, intended for use,	
☐ a person to be arrested or a person who is un	
The search is related to a violation of:	
Code Section	Offense Description
18 U.S.C. § 371	Conspiracy Wire Fraud and Wire Fraud Conspiracy
18 U.S.C. §§ 1343 and 1349 18 U.S.C. §§ 1956 and 1957	Money Laundering and Money Laundering Conspiracy
The application is based on these facts:	
✓ See Affidavit of Federal Bureau of Investigation Spe	cal Agent Andrew Cropcho continued on the attached sheet.
Delayed notice of days (give exact ending under 18 U.S.C. § 3103a, the basis of which is	g date if more than 30 days: is requested set forth on the attached sheet.
D	п
Pursuant to Fed. R. Crim. P. 4.1, this warrant is presented: 🗸 t	by reliable electronic means; or: telephonically recorded.
	Applicant's signature
	Andrew Cropcho, Special Agent
	Printed name and title
 The foregoing affidavit was sworn to before me and signed in The above-named agent provided a sworn statement attesting 	
4 - 11 1 2022	State Van Alan
Date: April 1, 2022	Judge's signature
City and state: Seattle, Washington	Hon. S. Kate Vaughan, United States Magistrate Judge
	Printed name and title

USAO: 2019R01037

1	<u>AFFIDAVIT</u>
2	STATE OF WASHINGTON)
3) ss
4	COUNTY OF KING)
5	
6	I, Andrew Cropcho, being duly sworn, hereby depose and state as follows:
7	INTRODUCTION AND AGENT BACKGROUND
8	1. I make this affidavit in support of an application for a search warrant for
9	information associated with certain accounts, further described below (collectively the
10	"Accounts"), that are stored at premises owned, maintained, controlled, or operated by
11	(a) Google LLC ("Google"), an electronic communications service and/or remote computing
12	service provider headquartered at 1600 Amphitheater Parkway, Mountain View, California;
13	and (b) Apple Inc. ("Apple"), an electronic communications service and/or remote
14	computing service provider headquartered at One Apple Park Way, Cupertino, California.
15	The information to be searched is described in the following paragraphs and in Attachments
16	A-1 and A-2. This affidavit is made in support of an application for a search warrant under
17	18 U.S.C. §§ 2703(a), 2703(b)(1)(A) and 2703(c)(1)(A) to require Google and Apple to
18	disclose to the government copies of the information (including the content of
19	communications) further described in Section I of Attachments B-1 and B-2. Upon receipt of
20	the information described in Section I of Attachments B-1 and B-2, government-authorized
21	persons will review that information to locate the items described in Section II of
22	Attachments B-1 and B-2.
23	2. The Accounts to be searched are as follows:
24	a. Google
25	• ivan@hashcoins.com (GOOGLE ACCOUNT 1);
26	• ivan@burfa.com (GOOGLE ACCOUNT 2);
27	 ivan.turygin@polybius.io (GOOGLE ACCOUNT 3);
28	 turygin@gmail.com (GOOGLE ACCOUNT 4);

 sergei@burfa.com (GOOGLE ACCOUNT 6); sergei.potapenko@polybius.io (GOOGLE ACCOUNT 7); sergei.potapenko@gmail.com (GOOGLE ACCOUNT 8); nikolay@hashcoins.com (GOOGLE ACCOUNT 9); nikolay.pavlovskiy@burfa.com (GOOGLE ACCOUNT 10); pavel@hashcoins.com (GOOGLE ACCOUNT 11); pavel.tsihhotski@burfa.com (GOOGLE ACCOUNT 12); pavel.tsihhotski@polybius.io (GOOGLE ACCOUNT 13); stanislav.pavlov@hashcoins.com (GOOGLE ACCOUNT 14); stanislav.pavlov@burfa.com (GOOGLE ACCOUNT 15); vadim.tsvetikov@hashcoins.com (GOOGLE ACCOUNT 16); 	
 sergei.potapenko@gmail.com (GOOGLE ACCOUNT 8); nikolay@hashcoins.com (GOOGLE ACCOUNT 9); nikolay.pavlovskiy@burfa.com (GOOGLE ACCOUNT 10); pavel@hashcoins.com (GOOGLE ACCOUNT 11); pavel.tsihhotski@burfa.com (GOOGLE ACCOUNT 12); pavel.tsihhotski@polybius.io (GOOGLE ACCOUNT 13); stanislav.pavlov@hashcoins.com (GOOGLE ACCOUNT 14); stanislav.pavlov@burfa.com (GOOGLE ACCOUNT 15); vadim.tsvetikov@hashcoins.com (GOOGLE ACCOUNT 16); 	
 nikolay@hashcoins.com (GOOGLE ACCOUNT 9); nikolay.pavlovskiy@burfa.com (GOOGLE ACCOUNT 10); pavel@hashcoins.com (GOOGLE ACCOUNT 11); pavel.tsihhotski@burfa.com (GOOGLE ACCOUNT 12); pavel.tsihhotski@polybius.io (GOOGLE ACCOUNT 13); stanislav.pavlov@hashcoins.com (GOOGLE ACCOUNT 14); stanislav.pavlov@burfa.com (GOOGLE ACCOUNT 15); vadim.tsvetikov@hashcoins.com (GOOGLE ACCOUNT 16); 	
 nikolay.pavlovskiy@burfa.com (GOOGLE ACCOUNT 10); pavel@hashcoins.com (GOOGLE ACCOUNT 11); pavel.tsihhotski@burfa.com (GOOGLE ACCOUNT 12); pavel.tsihhotski@polybius.io (GOOGLE ACCOUNT 13); stanislav.pavlov@hashcoins.com (GOOGLE ACCOUNT 14); stanislav.pavlov@burfa.com (GOOGLE ACCOUNT 15); vadim.tsvetikov@hashcoins.com (GOOGLE ACCOUNT 16); 	
 pavel@hashcoins.com (GOOGLE ACCOUNT 11); pavel.tsihhotski@burfa.com (GOOGLE ACCOUNT 12); pavel.tsihhotski@polybius.io (GOOGLE ACCOUNT 13); stanislav.pavlov@hashcoins.com (GOOGLE ACCOUNT 14); stanislav.pavlov@burfa.com (GOOGLE ACCOUNT 15); vadim.tsvetikov@hashcoins.com (GOOGLE ACCOUNT 16); 	
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 pavel.tsihhotski@polybius.io (GOOGLE ACCOUNT 13); stanislav.pavlov@hashcoins.com (GOOGLE ACCOUNT 14); stanislav.pavlov@burfa.com (GOOGLE ACCOUNT 15); vadim.tsvetikov@hashcoins.com (GOOGLE ACCOUNT 16); 	
 stanislav.pavlov@hashcoins.com (GOOGLE ACCOUNT 14); stanislav.pavlov@burfa.com (GOOGLE ACCOUNT 15); vadim.tsvetikov@hashcoins.com (GOOGLE ACCOUNT 16); 	
 stanislav.pavlov@burfa.com (GOOGLE ACCOUNT 15); vadim.tsvetikov@hashcoins.com (GOOGLE ACCOUNT 16); 	
• vadim.tsvetikov@hashcoins.com (GOOGLE ACCOUNT 16);	
12 11 41 61 6 (COOCLE ACCOUNTS 45)	
• vadim.tsvetikov@burfa.com (GOOGLE ACCOUNT 17);	
• vitali@hashcoins.com (GOOGLE ACCOUNT 18);	
• vitali@burfa.com (GOOGLE ACCOUNT 19);	
• anton.altement@polybius.io (GOOGLE ACCOUNT 20);	
• edgar.bers@polybius.io (GOOGLE ACCOUNT 21);	
• tatjana@burfa.com (GOOGLE ACCOUNT 22);	
• margarita.burunova@hashcoins.com (GOOGLE ACCOUNT 23)	,
• dalmeronprojects@gmail.com (GOOGLE ACCOUNT 24);	
• ecohousenetworks@gmail.com (GOOGLE ACCOUNT 25);	
• admin@hashcoins.com (GOOGLE ACCOUNT 26);	
• info@hashcoins.com (GOOGLE ACCOUNT 27);	
• info@burfa.com (GOOGLE ACCOUNT 28);	
• info@polybius.io (GOOGLE ACCOUNT 29);	
• invoices@hashcoins.com (GOOGLE ACCOUNT 30);	
• invoices@burfa.com (GOOGLE ACCOUNT 31);	
microsoft@hashcoins.com (GOOGLE ACCOUNT 32);	

1	• cb@hashcoins.com (GOOGLE ACCOUNT 33);
2	• licenses@hashcoins.com (GOOGLE ACCOUNT 34);
3	alerts.mining@burfa.com (GOOGLE ACCOUNT 35); and
4	 support@polybius.io (GOOGLE ACCOUNT 36);
5	(collectively the "GOOGLE ACCOUNTS"); and
6	b. Apple
7	Sergei.potapenko@gmail.com (DSID 624556209) ("APPLE
8	ACCOUNT 1") (believed to be used by SERGEI POTAPENKO); and
9	Turygin@gmail.com (DSID 1931852295) ("APPLE ACCOUNT 2")
10	(believed to be used by IVAN TURYGIN);
11	(collectively the "APPLE ACCOUNTS").
12	3. I am a Special Agent with the Federal Bureau of Investigation ("FBI") and
13	have been since May of 2018. I am currently assigned to the Seattle Field Office. My
14	primary duties include investigating violations of Federal law, including corporate fraud,
15	securities fraud, government program fraud, and healthcare fraud. Part of those duties
16	include investigating instances of wire fraud being used for financial gain at the expense of
17	others. Before my career as an FBI Special Agent, I was employed by a large public
18	accounting firm for over three years and, as part of my employment, I examined financial
19	information of clients to determine their accuracy, reliability, and sources.
20	4. The facts set forth in this Affidavit are based on my own personal knowledge;
21	knowledge obtained from other individuals during my participation in this investigation,
22	including other law enforcement personnel; review of documents and records related to this
23	investigation; communications with others who have personal knowledge of the events and
24	circumstances described herein including, but not limited to, the victims in this investigation
25	and information gained through my training and experience.
26	5. This affidavit is intended to show merely that there is sufficient probable cause
27	for the requested warrant and does not set forth all of my knowledge about this matter.
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1 | 6. Based on my training and experience, and the facts as set forth in this affidavit, there is probable cause to believe that violations of Title 18, United States Code, Sections 371 (Conspiracy), 1343 (Wire Fraud), 1349 (Wire Fraud Conspiracy), 1956 (Money Laundering), and 1957 (Money Laundering-transactions over \$10,000) have been committed by IVAN TURYGIN and SERGEI POTAPENKO, individually, and by and through the use of their companies HASHCOINS OU, HASHCOINS TRADE OU, HASHCOINS LP (collectively, "HASHCOINS"); HASHFLARE LP ("HASHFLARE"); Burfa Capital OU, 8 Burfa Media OU, Burfa Real Estate OU, Burfa Tech OU, Burfa Trade OU, Burfa Invest OU (collectively, the "BURFA Entities"); Polybius Foundation OU, Polybius Tech OU, Polybius Ventures OU, Polybius Fintech MidCo OU (collectively, "POLYBIUS"); and Dalmeron Projects LP ("DALMERON"), along with other co-conspirators, known and unknown, including identified key employees of the same companies. There is also probable cause to search the information described in Attachments A, for evidence, instrumentalities, or contraband of these crimes, as described in Attachments B.

JURISDICTION

- 7. This Court has jurisdiction to issue the requested warrant because it is "a court of competent jurisdiction" as defined by 18 U.S.C. § 2711. 18 U.S.C. §§ 2703(a), (b)(1)(A) & (c)(1)(A). Specifically, the Court is "a district court of the United States . . . that has jurisdiction over the offense[s] being investigated." 18 U.S.C. § 2711(3)(A)(i).
- Pursuant to 18 U.S.C. § 2703(g), the presence of a law enforcement officer is not required for the service or execution of this warrant.
- This warrant application is to be presented electronically pursuant to Local Criminal Rule CrR 41(d)(3).

PROCEDURAL HISTORY

10. On April 3, 2020, in connection with the pendent investigation, the Honorable Brian A. Tsuchida, United States Magistrate Judge, issued a search warrant pursuant to Title 18, United States Code, Sections 2703(a), 2703(b)(1)(A), and 2703(c)(1)(A), requiring Google to disclose to the government copies of certain information and records pertaining to

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- 11. On March 11, 2021, the Honorable John L. Weinberg, United States Magistrate Judge, issued a search warrant pursuant to Title 18, United States Code, Sections 2703(a), 2703(b)(1)(A), and 2703(c)(1)(A), requiring Apple to disclose to the government copies of certain information and records pertaining to the Apple Accounts and authorizing the government to seize specified information and records. *See* MJ21-149. The relevant time period for the information and records subject to disclosure and seizure under the search warrant was the inception of each relevant account through the date of the search warrant.
- 12. The April 3, 2020, and March 11, 2021, search warrants are collectively referred to herein as the "Search Warrants."
- 13. In support of its applications for the Search Warrants, the United States submitted two affidavits (collectively, the "Affidavits"). I was the affiant for both Affidavits, and I swore to the truth and accuracy of their contents.
- 14. The Affidavits are incorporated by reference herein and appended to this search warrant application.

BACKGROUND ON VIRTUAL CURRENCY AND MINING

15. Virtual currency (also known as cryptocurrency) is an asset that can be exchanged directly person to person, through a virtual currency exchange, or through other intermediaries. It can be used to buy goods and services, exchanged for "fiat currency" (currency established by government regulation or law) or other virtual currency, or held as an investment, among other applications.

¹ The search warrant included four additional accounts not included in the Google Accounts listed above. One of those additional accounts contained a clerical error as written, so Google did not provide any information associated with the account. The other three accounts were not associated with any information or records seized by the FBI. Accordingly, those four additional accounts are not included in this search warrant application.

- 16. Virtual currency is generally not issued by any government or bank. Rather, it is frequently generated and controlled through software operating on a decentralized, peer-to-peer ("P2P") network of computers across the world. (Some types of virtual currency, however, are generated and controlled through software operating on a centralized network of computers across the world.)
- 17. There are thousands of virtual currencies in use, including Bitcoin, Ethereum, Bitcoin Cash, and Monero. Bitcoin,² the most popular form of virtual currency, can be generated through mining. According to Bitcoin.org, "Bitcoin mining is the process of making computer hardware do mathematical calculations for the Bitcoin network to confirm transactions and increase security. As a reward for their services, Bitcoin miners can collect transaction fees for the transactions they confirm, along with newly created bitcoins."
- 18. Bitcoin mining can be conducted locally on a user's computer or other computer hardware, or it can be conducted on another's system via the cloud. According to the Santa Clara Law School High Technology Journal: "Cloud mining is an economic arrangement whereby a person pays another person or entity to engage in cryptocurrency mining on their behalf and receives the transaction fees, cryptocurrency or a portion thereof that is generated from such mining efforts."
- 19. One measure for determining the effectiveness or processing power of a mining operation is to calculate the operation's hash rate. According to Bitcoin.org: "The hash rate is the measuring unit of the processing power of the Bitcoin network. The Bitcoin network must make intensive mathematical operations for security purposes. When the network reached a hash rate of 10 Th/s, it meant it could make 10 trillion calculations per second."
- 20. Bitcoin utilizes "public key cryptography," a mathematical algorithm that generates a pair of unique, corresponding keys: the "public key" and the "private key." These

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² Since Bitcoin is both a virtual currency and a protocol, capitalization differs. Accepted practice is to use "Bitcoin" (singular with an uppercase letter B) to label the protocol, software, and community, and "bitcoin" (with a lowercase letter b) to label units of the virtual currency. That practice is adopted here.

- components form the "public address," which is used to send and receive bitcoins and can be shared. A public address is akin to a bank account number, and a private key is akin to a Personal Identification Number ("PIN") or password. Only the holder of a public address's private key can authorize transfers of virtual currency from that public address to another public address.
- 21. Many virtual currencies operate via a "blockchain," a record (or ledger) of every transaction ever conducted that is distributed throughout the computer network (as opposed to being maintained by any single administrator or entity). As to bitcoins, although the public addresses of those engaging in virtual currency transactions are recorded on a blockchain, the identities of the individuals or entities behind the public addresses are not recorded on these public ledgers. If, however, an individual or entity is linked to a public address, it may be possible to determine what transactions were conducted by that individual or entity. Bitcoin transactions are therefore sometimes described as "pseudonymous," meaning that they are partially anonymous.
- 22. Virtual currency users typically employ a "wallet," a tool that can be used to manage public and private keys, interface with a blockchain, and send or receive virtual currency. Wallets vary widely in terms of their format and technological sophistication. One variety, known as "hosted" (or "custodial") wallets, are virtual-currency wallets controlled by a third party—often, a company with a cloud-based, encrypted wallet platform that may be hosted on the company's servers. Users of hosted wallets may be able to access the company's platform through various digital devices, much like a traditional online banking experience. Hosted wallet providers include virtual currency exchanges, which allow their customers, for a fee, to exchange virtual currency for other virtual currencies and/or fiat currencies.
- 23. Virtual currencies are sometimes launched through Initial Coin Offerings ("ICO"). An ICO is a capital raising event in which an entity offers investors a unique "coin" or "token" in exchange for consideration—most commonly in the form of established virtual currencies or fiat currency. These tokens are issued on a blockchain and are sometimes

listed on online platforms, called virtual currency exchanges, where they are tradable for virtual or fiat currencies. To participate in an ICO, investors are typically required to transfer virtual currencies to the issuer's address, online wallet, or other account. During an ICO, or after its completion, the issuer would typically distribute its unique "tokens" to the participant's unique address on the related virtual currency's blockchain. Similar to stockholders in an initial public offering ("IPO"), holders of tokens are entitled to certain rights related to a venture underlying the ICO, such as profits, shares of assets, use of certain services provided by the issuer, and voting rights.

STATEMENT OF PROBABLE CAUSE

A. Summary of Investigation

- 24. There is probable cause to believe that Estonian nationals IVAN TURYGIN and SERGEI POTAPENKO, as well as various corporate entities they owned and/or controlled, and other co-conspirators, carried out a multi-faceted wire-fraud and money-laundering conspiracy, in violation of 18 U.S.C. §§ 371, 1343, 1349, 1956, and 1957. As discussed below, from approximately 2014 through 2018, TURYGIN, POTAPENKO, and other co-conspirators deceived and defrauded others in relation to cryptocurrency and cryptocurrency-related ventures, all for their own personal gain. They further engaged in a series of financial and monetary transactions to obfuscate the true nature and location of the fraudulently obtained funds, and to enrich themselves.
- 25. This fraud scheme had four distinct stages, which together constitute a scheme or artifice to defraud:
- a. *Sale of Cryptocurrency Mining Hardware and Equipment:* In 2014, through HASHCOINS, TURYGIN and POTAPENKO sold cryptocurrency mining hardware and equipment they did not have. When the influx of contracts to purchase mining equipment far outpaced HASHCOIN's ability to fulfill the contracts, TURYGIN and POTAPENKO revised the contracts to redirect existing and new customers to a purported cloud-based platform to mine Bitcoin and other cryptocurrencies offered by HASHFLARE, which TURYGIN and POTAPENKO also owned and operated.

1	b. Sale of Cryptocurrency Mining Contracts: TURYGIN, POTAPENKO, and
2	other co-conspirators operated HASHFLARE as a fraud and Ponzi scheme beginning in or
3	around 2015 and continuing through mid-2018. During this time, they fraudulently induced
4	thousands of individuals, including one or more of whom resided in the Western District of
5	Washington, to invest in contracts that guaranteed the buyer a portion of HASHFLARE's
6	purported cryptocurrency mining power, and thus a portion of the resulting profits. In order
7	to avoid repaying HASHFLARE investors, TURYGIN and POTAPENKO instituted
8	material changes to the HASHFLARE investor agreements, substantially reducing payments
9	to investors and restricting their abilities to withdraw funds. Then, in July 2018,
10	HASHFLARE unilaterally canceled its contracts with investors and stopped paying annual
11	returns, claiming that cryptocurrency mining was no longer profitable. ³ In fact, the vast
12	majority of annual returns HASHFLARE had paid up to that point were sourced from
13	victims' deposits, not from cryptocurrency mining. To date, the FBI has identified at least
14	\$175 million that victims transferred to HASHFLARE, most of which TURYGIN and
15	POTAPENKO laundered through various shell companies, bank accounts, and
16	cryptocurrency wallets they controlled, or otherwise used to perpetuate their fraud scheme.
17	c. <i>Polybius Initial Coin Offering</i> : In 2017, leveraging the apparent success of
18	their cloud-mining operations, TURYGIN, POTAPENKO, and others perpetuated their wire-
19	fraud scheme by using proceeds from the initial phase of the scheme—i.e., the
20	HASHFLARE Ponzi scheme—to partially fund the launch of POLYBIUS, and the ICO of
21	PLBT, POLYBIUS's newly minted cryptocurrency token. TURYGIN, POTAPENKO, and
22	others induced victims to purchase tens of millions of dollars of PLBT tokens by making

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numerous misrepresentations about POLYBIUS and PLBT including, without limitation,

that POLYBIUS would use the ICO proceeds to develop a digital bank and would pay

³ These material alterations and purported cancellation of mining contracts were the subject of a purported class action lawsuit filed in the Central District of California, Baylog et al. v. Hashflare LP, No. 18-CV0343. In defending that lawsuit, HASHFLARE continued to falsely represent in court filings that it was a legitimate enterprise and investment vehicle for cloud-based cryptocurrency mining.

dividends to holders of PLBT tokens. Not long after completion of the ICO in June 2017, POLYBIUS publicly dropped any pretext that it intended to build a digital bank. POLYBIUS transferred much of the estimated \$32 million it raised in the ICO to shell companies, bank accounts, and/or cryptocurrency wallets controlled by TURYGIN and POTAPENKO.

- d. *Laundering Proceeds:* TURYGIN, POTAPENKO, and others funneled the fraudulently obtained victim funds through a convoluted network of domestic and international shell companies—including HASHCOINS, DALMERON, and the BURFA Entities—bank accounts, cryptocurrency exchanges, cryptocurrency wallets, and tangible property, all of which they owned and/or controlled, in order to conceal the nature, location, source, ownership, and control of the funds, and to promote additional fraudulent conduct. Additionally, TURYGIN and POTAPENKO used fraud proceeds to fund their lavish lifestyle, which included extensive travel on private jets, stays at luxurious international villas, and the purchase of real estate and luxury cars in Estonia. Even after ostensibly shuttering HASHFLARE, TURYGIN and POTAPENKO used fraud proceeds to purchase expensive cryptocurrency mining hardware, which they used to mine cryptocurrencies for personal gain.
- 26. The Accounts, described in more detail below, are believed to be used to facilitate the scheme and/or associated with the individual or individuals behind the scheme.

B. Evidence Obtained from Previous Search Warrants

- 27. The FBI executed the Search Warrants and reviewed the information and records provided by Google and Apple. All of the Google and Apple Accounts were associated with at least some information and records containing evidence of the wire-fraud and money-laundering scheme described above. Representative, non-exclusive examples of the relevant information and records obtained from the Search Warrants are set forth below.
- 28. Records stored by Google associated with Google Accounts 2 (TURYGIN), 16 (Vadim Tsvetikov), 18 (Vitali Pavlov), and 22 (Tatjana Potapova) contained evidence of HASHFLARE's inability to provide cloud-mining services it sold to customers. Specifically, the accounts contained information and records evidencing HASHCOINS' and

HASHFLARE's efforts to place a nominal amount of cryptocurrency mining equipment into service toward the end of HASHFLARE's operations in 2018. This was the first instance since HASHFLARE began selling cloud-mining contracts in 2015 in which either HASHCOINS or HASHFLARE was associated with a datacenter housing its own cryptocurrency mining equipment.

- 29. Similarly, records stored by Google associated with Google Accounts 2 (TURYGIN), 5 (POTAPENKO), and 22 (Tatjana Potapova), contained bank records for Connectum, Ltd., bank accounts being used by the BURFA and HASHCOINS entities to perpetuate the fraud schemes. Those records show that the Connectum bank accounts received what appear to be victim deposits from purchases of HASHFLARE cloud-mining contracts. Those Connectum bank accounts then sent large sums of funds to Cryptopay, Ltd.—a fiat-cryptocurrency exchange—with notations evidencing the purchase of cryptocurrency. The FBI's independent analyses of the Bitcoin and Ether blockchains trace cryptocurrency from wallets held by Cryptopay to wallets held or controlled by TURYGIN, POTAPENKO, and their various entities, through elaborate peel chains⁴, and ultimately on to what appear to be victims' wallets. This suggests that, as part of its Ponzi scheme, HASHFLARE converted victims' funds deposited in its Connectum bank accounts into cryptocurrency, which it then used to pay back other victims.
- 30. The Connectum bank records obtained from some of the Google Accounts also show an interconnectedness among HASHCOINS, HASHFLARE, the BURFA Entities, DALMERON, and POLYBIUS, which all claim to be independent entities. The bank records contain millions of dollars of inter-entity transactions, suggesting that TURYGIN,

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⁴ A "peel chain" is a technique often used to launder large amounts of cryptocurrency by using a lengthy "chain" of smaller transactions. In a peel chain, a small portion of the overall amount to be transferred "peels" off from the main address in a relatively low-value transfer. (In this case, TURYGIN and POTAPENKO would "peel" off chunks of 10 bitcoin for transfer into a larger HASHFLARE scam cluster.) The remaining balance of the larger cryptocurrency amount—the "change"—transfers to a new change address, and the process repeats itself until the desired larger transfer is complete. TURYGIN and POTAPENKO's use of a peel chain here appears designed to prevent or disrupt victims from tracing payments they received from HASHFLARE back to the wallets that had received the initial victim deposits.

POTAPENKO, and others used the network of companies to move money and to conceal location, nature, source, ownership, and/or control of funds.

- 31. The Google Accounts searched by the FBI pursuant to the Search Warrants also contained informative records concerning the PLBT ICO. Google Accounts 2 (TURGYIN), 24 (DALMERON), and 29 (POLYBIUS), for example, contained marketing e-mails that appear to have been sent to the public and which made representations about Polybius's business goals. Google Account 2 contained POLYBIUS internal business plans and records identifying potential victims of the PLBT ICO.
- 32. In Apple Account 1, which is associated with POTAPENKO, the FBI found records which appear to show that DALMERON purchased private jet flights to Greece for POTAPENKO and his family. POTAPENKO has previously asserted no connection with DALMERON, which the FBI learned from other records received tens of millions of dollars from HASHFLARE during the time period of the alleged Ponzi scheme, and which sent millions of dollars on to POLYBIUS.
- 33. In Apple Account 2, which is associated with TURYGIN, the FBI found records providing a summary of bank accounts associated with TURGYIN at the Tallinn Business Bank in Estonia. The summary helped the FBI determine whether it had a full accounting of records from that bank.
- 34. The FBI also located bank records illustrating how POTAPENKO and TURYGIN appear to be using shell companies to facilitate payments to themselves. For example, in Apple Account 2, the FBI found bank records showing a 30,000 Euro deposit into an Ecohouse Networks LP bank account from HASHCOINS, on July 24, 2015, with a notation that the payment was for "computational power leasing." On July 24, 2015, and August 11, 2015, a total of 29,000 Euros were transferred from the Ecohouse Networks LP bank account to TURYGIN, indicating TURYGIN used a shell company as a conduit for a passthrough payment to him disguised as a payment for computational power leasing.
- 35. Given that the Accounts contained evidence of the multi-stage fraud and money laundering conspiracy, including numerous bank records, I believe an updated search

of Accounts is likely to return additional evidence of the alleged violations under investigation by the FBI. In particular, up-to-date records may help the FBI identify how TURYGIN, POTAPENKO, and others continued to spend and move fraud proceeds from the dates of the earlier search warrants until the present. This may help the FBI identify the current location of any assets that could be returned to or otherwise used to compensate victims for their losses.

BACKGROUND CONCERNING GOOGLE⁵

- 36. Google is a United States company that offers to the public through its Google Accounts a variety of online services, including email, cloud storage, digital payments, and productivity applications, which can be accessed through a web browser or mobile applications. Google also offers to anyone, whether or not they have a Google Account, a free web browser called Google Chrome, a free search engine called Google Search, a free video streaming site called YouTube, a free mapping service called Google Maps, and a free traffic tracking service called Waze. Many of these free services offer additional functionality if the user signs into their Google Account.
- 37. In addition, Google offers an operating system ("OS") for mobile devices, including cellular phones, known as Android. Google also sells devices, including laptops, mobile phones, tablets, smart speakers, security cameras, and wireless routers. Users of Android and Google devices are prompted to connect their device to a Google Account when they first turn on the device, and a Google Account is required for certain functionalities on these devices.
- 38. Signing up for a Google Account automatically generates an email address at the domain gmail.com. That email address will be the log-in username for access to the Google Account.

⁵ The information in this section is based on information published by Google on its public websites, including, but not limited to, the following webpages: the "Google legal policy and products" page available to registered law enforcement at lers.google.com; product pages on support.google.com; or product pages on about.google.com.

- 39. Google advertises its services as "One Account. All of Google working for you." Once logged into a Google Account, a user can connect to Google's full suite of services offered to the general public, described in further detail below. In addition, Google keeps certain records indicating ownership and usage of the Google Account across services, described further after the description of services below:
 - a. <u>Email</u>. Google provides email services (called Gmail) to Google Accounts through email addresses at gmail.com or enterprise email addresses hosted by Google.
 - b. Contacts. Google Contacts stores contacts the user affirmatively adds to the address book, as well as contacts the user has interacted with in Google products. Google Contacts can store up to 25,000 contacts. Users can send messages to more than one contact at a time by manually creating a group within Google Contacts or communicate with an email distribution list called a Google Group. Users have the option to sync their Android mobile phone or device address book with their account so it is stored in Google Contacts. Google preserves contacts indefinitely, unless the user deletes them. Contacts can be accessed from the same browser window as other Google products like Gmail and Calendar.
 - c. <u>Calendar</u>. Google provides an appointment book for Google Accounts through Google Calendar, which can be accessed through a browser or mobile application. Users can create events or RSVP to events created by others in Google Calendar. Google Calendar can be set to generate reminder emails or alarms about events or tasks, repeat events at specified intervals, track RSVPs, and auto-schedule appointments to complete periodic goals (like running three times a week). A single Google Account can set up multiple calendars. An entire calendar can be shared with other Google Accounts by the user or made public so anyone can access it. Users have the option to sync their mobile phone or device calendar so it is stored in Google Calendar. Google preserves

- appointments indefinitely, unless the user deletes them. Calendar can be accessed from the same browser window as other Google products like Gmail and Contacts.
- d. Maps. Google offers a map service called Google Maps which can be searched for addresses or points of interest. Google Maps can provide users with turn-by-turn directions from one location to another using a range of transportation options (driving, biking, walking, etc.) and real-time traffic updates. Users can share their real-time location with others through Google Maps by using the Location Sharing feature. And users can find and plan an itinerary using Google Trips. A Google Account is not required to use Google Maps, but if users log into their Google Account while using Google Maps, they can save locations to their account, keep a history of their Google Maps searches, and create personalized maps using Google My Maps. Google stores Maps data indefinitely, unless the user deletes it.
- e. Messaging. Google provides several messaging services including Duo, Messages, Hangouts, Meet, and Chat. These services enable real-time text, voice, and/or video communications through browsers and mobile applications, and also allow users to send and receive text messages, videos, photos, locations, links, and contacts. Google may retain a user's messages if the user has not disabled that feature or deleted the messages, though other factors may also impact retention.
- f. <u>Cloud Storage</u>. Google Drive is a cloud storage service automatically created for each Google Account. Users can store an unlimited number of documents created by Google productivity applications like Google Docs (Google's word processor), Google Sheets (Google's spreadsheet program), Google Forms (Google's web form service), and Google Slides, (Google's presentation program). Users can also upload files to Google Drive, including photos, videos, PDFs, and text documents, until they hit the storage limit. Users can set

up their personal computer or mobile phone to automatically back up files to their Google Drive Account. Each user gets 15 gigabytes of space for free on servers controlled by Google and may purchase more through a subscription plan called Google One. In addition, Google Drive allows users to share their stored files and documents with up to 100 people and grant those with access the ability to edit or comment. Google maintains a record of who made changes when to documents edited in Google productivity applications. Documents shared with a user are saved in their Google Drive in a folder called "Shared with me." Google preserves files stored in Google Drive indefinitely, unless the user deletes them.

- g. Photos. Google offers a cloud-based photo and video storage service called Google Photos. Users can share or receive photos and videos with others. Google Photos can be trained to recognize individuals, places, and objects in photos and videos and automatically tag them for easy retrieval via a search bar. Users have the option to sync their mobile phone or device photos to Google Photos. Google preserves files stored in Google Photos indefinitely, unless the user deletes them.
- h. Web Browser. Google offers a free web browser service called Google Chrome which facilitates access to the Internet. Chrome retains a record of a user's browsing history and allows users to save favorite sites as bookmarks for easy access. If a user is logged into their Google Account on Chrome and has the appropriate settings enabled, their browsing history, bookmarks, and other browser settings may be saved to their Google Account in a record called My Activity.
- 40. Google integrates its various services to make it easier for Google Accounts to access the full Google suite of services. For example, users accessing their Google Account through their browser can toggle between Google Services via a toolbar displayed on the top of most Google service pages, including Gmail and Drive. Google Hangout, Meet, and Chat

- conversations pop up within the same browser window as Gmail. Attachments in Gmail are displayed with a button that allows the user to save the attachment directly to Google Drive. If someone shares a document with a Google Account user in Google Docs, the contact information for that individual will be saved in the user's Google Contacts. Google Voice voicemail transcripts and missed call notifications can be sent to a user's Gmail account. And if a user logs into their Google Account on the Chrome browser, their subsequent Chrome browser and Google Search activity is associated with that Google Account, depending on user settings.
- 41. When individuals register with Google for a Google Account, Google asks users to provide certain personal identifying information, including the user's full name, telephone number, birthday, and gender. If a user is paying for services, the user must also provide a physical address and means and source of payment.
- 42. Google typically retains and can provide certain transactional information about the creation and use of each account on its system. Google captures the date on which the account was created, the length of service, log-in times and durations, the types of services utilized by the Google Account, the status of the account (including whether the account is inactive or closed), the methods used to connect to the account (such as logging into the account via Google's website or using a mobile application), details about the devices used to access the account, and other log files that reflect usage of the account. In addition, Google keeps records of the Internet Protocol ("IP") addresses used to register the account and accept Google's terms of service, as well as the IP addresses associated with particular logins to the account. Because every device that connects to the Internet must use an IP address, IP address information can help to identify which computers or other devices were used to access the Google Account.
- 43. Google maintains the communications, files, and associated records for each service used by a Google Account on servers under its control. Even after a user deletes a communication or file from their Google Account, it may continue to be available on Google's servers for a certain period of time.

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- 44. In my training and experience, evidence of who was using a Google account and from where, and evidence related to criminal activity of the kind described above, may be found in the files and records described above. This evidence may establish the "who, what, why, when, where, and how" of the criminal conduct under investigation, thus enabling the United States to establish and prove each element or, alternatively, to exclude the innocent from further suspicion.
- 45. Based on my training and experience, messages, emails, voicemails, photos, videos, documents, and internet searches are often created and used in furtherance of criminal activity, including to communicate and facilitate the offenses under investigation. Thus, stored communications and files connected to a Google Account may provide direct evidence of the offenses under investigation.
- 46. In addition, the user's account activity, logs, stored electronic communications, and other data retained by Google can indicate who has used or controlled the account. This "user attribution" evidence is analogous to the search for "indicia of occupancy" while executing a search warrant at a residence. For example, subscriber information, email and messaging logs, documents, and photos and videos (and the data associated with the foregoing, such as geo-location, date and time) may be evidence of who used or controlled the account at a relevant time. As an example, because every device has unique hardware and software identifiers, and because every device that connects to the Internet must use an IP address, IP address and device identifier information can help to identify which computers or other devices were used to access the account. Such information also allows investigators to understand the geographic and chronological context of access, use, and events relating to the crime under investigation.
- 47. Account activity may also provide relevant insight into the account owner's state of mind as it relates to the offenses under investigation. For example, information on the account may indicate the owner's motive and intent to commit a crime (e.g., information indicating a plan to commit a crime), or consciousness of guilt (e.g., deleting account information in an effort to conceal evidence from law enforcement).

- 48. Other information connected to the use of a Google account may lead to the discovery of additional evidence. For example, the apps downloaded from the Google Play store may reveal services used in furtherance of the crimes under investigation, such as banking institutions used by the target or services used to communicate with co-conspirators. In addition, emails, instant messages, Internet activity, documents, and contact and calendar information can lead to the identification of co-conspirators and instrumentalities of the crimes under investigation.
- 49. Therefore, Google's servers are likely to contain stored electronic communications and information concerning subscribers and their use of Google services. In my training and experience, such information may constitute evidence of the crimes under investigation including information that can be used to identify the account's user or users.

BACKGROUND CONCERNING APPLE⁶

- 50. Apple is a United States company that produces the iPhone, iPad, and iPod Touch, all of which use the iOS operating system, and desktop and laptop computers based on the Mac OS operating system.
- 51. Apple provides a variety of services that can be accessed from Apple devices or, in some cases, other devices via web browsers or mobile and desktop applications ("apps"). As described in further detail below, the services include email, instant messaging, and file storage:
 - a. Apple provides email service to its users through email addresses at the domain names mac.com, me.com, and icloud.com.

https://www.apple.com/business/docs/iOS Security Guide.pdf, and "iCloud: How Can I Use iCloud?," available at https://support.apple.com/kb/PH26502.

⁶ The information in this section is based on information published by Apple on its website, including, but not limited to, the following document and webpages: "U.S. Law Enforcement Legal Process Guidelines," available at https://www.apple.com/legal/privacy/law-enforcement-guidelines-us.pdf; "Create and start using an Apple ID," available at https://support.apple.com/en-us/HT203993; "iCloud," available at https://support.apple.com/kb/PH12519; "iOS Security," available at

- b. iMessage and FaceTime allow users of Apple devices to communicate in realtime. iMessage enables users of Apple devices to exchange instant messages ("iMessages") containing text, photos, videos, locations, and contacts, while FaceTime enables those users to conduct audio and video calls.
- c. iCloud is a cloud storage and cloud computing service from Apple that allows its users to interact with Apple's servers to utilize iCloud-connected services to create, store, access, share, and synchronize data on Apple devices or via icloud.com on any Internet-connected device. For example, iCloud Mail enables a user to access Apple-provided email accounts on multiple Apple devices and on iCloud.com. iCloud Photo Library and My Photo Stream can be used to store and manage images and videos taken from Apple devices, and iCloud Photo Sharing allows the user to share those images and videos with other Apple subscribers. iCloud Drive can be used to store presentations, spreadsheets, and other documents. iCloud Tabs and bookmarks enable iCloud to be used to synchronize bookmarks and webpages opened in the Safari web browsers on all of the user's Apple devices. iCloud Backup allows users to create a backup of their device data. iWork Apps, a suite of productivity apps (Pages, Numbers, Keynote, and Notes), enables iCloud to be used to create, store, and share documents, spreadsheets, and presentations. iCloud Keychain enables a user to keep website username and passwords, credit card information, and Wi-Fi network information synchronized across multiple Apple devices.
- d. Game Center, Apple's social gaming network, allows users of Apple devices to play and share games with each other.
- e. Find My iPhone allows owners of Apple devices to remotely identify and track the location of, display a message on, and wipe the contents of those devices. Find My Friends allows owners of Apple devices to share locations.

- f. Location Services allows apps and websites to use information from cellular, Wi-Fi, Global Positioning System ("GPS") networks, and Bluetooth, to determine a user's approximate location.
- g. App Store and iTunes Store are used to purchase and download digital content. iOS apps can be purchased and downloaded through App Store on iOS devices, or through iTunes Store on desktop and laptop computers running either Microsoft Windows or Mac OS. Additional digital content, including music, movies, and television shows, can be purchased through iTunes Store on iOS devices and on desktop and laptop computers running either Microsoft Windows or Mac OS.
- 52. Apple services are accessed through the use of an "Apple ID," an account created during the setup of an Apple device or through the iTunes or iCloud services. The account identifier for an Apple ID is an email address, provided by the user. Users can submit an Apple-provided email address (often ending in @icloud.com, @me.com, or @mac.com) or an email address associated with a third-party email provider (such as Gmail, Yahoo, or Hotmail). The Apple ID can be used to access most Apple services (including iCloud, iMessage, and FaceTime) only after the user accesses and responds to a "verification email" sent by Apple to that "primary" email address. Additional email addresses ("alternate," "rescue," and "notification" email addresses) can also be associated with an Apple ID by the user. A single Apple ID can be linked to multiple Apple services and devices, serving as a central authentication and syncing mechanism.
- 53. Apple captures information associated with the creation and use of an Apple ID. During the creation of an Apple ID, the user must provide basic personal information including the user's full name, physical address, and telephone numbers. The user may also provide means of payment for products offered by Apple. The subscriber information and password associated with an Apple ID can be changed by the user through the "My Apple ID" and "iForgot" pages on Apple's website. In addition, Apple captures the date on which the account was created, the length of service, records of log-in times and durations, the

types of service utilized, the status of the account (including whether the account is inactive or closed), the methods used to connect to and utilize the account, the Internet Protocol address ("IP address") used to register and access the account, and other log files that reflect usage of the account.

- 54. Additional information is captured by Apple in connection with the use of an Apple ID to access certain services. For example, Apple maintains connection logs with IP addresses that reflect a user's sign-on activity for Apple services such as iTunes Store and App Store, iCloud, Game Center, and the My Apple ID and iForgot pages on Apple's website. Apple also maintains records reflecting a user's app purchases from App Store and iTunes Store, "call invitation logs" for FaceTime calls, "query logs" for iMessage, and "mail logs" for activity over an Apple-provided email account. Records relating to the use of the Find My iPhone service, including connection logs and requests to remotely lock or erase a device, are also maintained by Apple.
- 55. Apple also maintains information about the devices associated with an Apple ID. When a user activates or upgrades an iOS device, Apple captures and retains the user's IP address and identifiers such as the Integrated Circuit Card ID number ("ICCID"), which is the serial number of the device's SIM card. Similarly, the telephone number of a user's iPhone is linked to an Apple ID when the user signs into FaceTime or iMessage. Apple also may maintain records of other device identifiers, including the Media Access Control address ("MAC address"), the unique device identifier ("UDID"), and the serial number. In addition, information about a user's computer is captured when iTunes is used on that computer to play content associated with an Apple ID, and information about a user's web browser may be captured when used to access services through icloud.com and apple.com. Apple also retains records related to communications between users and Apple customer service, including communications regarding a particular Apple device or service, and the repair history for a device.
- 56. Apple provides users with five gigabytes of free electronic space on iCloud, and users can purchase additional storage space. That storage space, located on servers

controlled by Apple, may contain data associated with the use of iCloud-connected services, including: email (iCloud Mail); images and videos (iCloud Photo Library, My Photo Stream, and iCloud Photo Sharing); documents, spreadsheets, presentations, and other files (iWork and iCloud Drive); and web browser settings and Wi-Fi network information (iCloud Tabs and iCloud Keychain). iCloud can also be used to store iOS device backups, which can contain a user's photos and videos, iMessages, Short Message Service ("SMS") and Multimedia Messaging Service ("MMS") messages, voicemail messages, call history, contacts, calendar events, reminders, notes, app data and settings, Apple Watch backups, and other data. Records and data associated with third-party apps may also be stored on iCloud; for example, the iOS app for WhatsApp, an instant messaging service, can be configured to regularly back up a user's instant messages on iCloud Drive. Some of this data is stored on Apple's servers in an encrypted form but can nonetheless be decrypted by Apple.

- 57. In my training and experience, evidence of who was using an Apple ID and from where, and evidence related to criminal activity of the kind described above, may be found in the files and records described above. This evidence may establish the "who, what, why, when, where, and how" of the criminal conduct under investigation, thus enabling the United States to establish and prove each element or, alternatively, to exclude the innocent from further suspicion.
- 58. For example, the stored communications and files connected to an Apple ID may provide direct evidence of the offenses under investigation. Based on my training and experience, instant messages, emails, voicemails, photos, videos, and documents are often created and used in furtherance of criminal activity, including to communicate and facilitate the offenses under investigation.
- 59. In addition, the user's account activity, logs, stored electronic communications, and other data retained by Apple can indicate who has used or controlled the account. This "user attribution" evidence is analogous to the search for "indicia of occupancy" while executing a search warrant at a residence. For example, subscriber information, email and messaging logs, documents, and photos and videos (and the data associated with the

foregoing, such as geo-location, date and time) may be evidence of who used or controlled the account at a relevant time. As an example, because every device has unique hardware and software identifiers, and because every device that connects to the Internet must use an IP address, IP address and device identifier information can help to identify which computers or other devices were used to access the account. Such information also allows investigators to understand the geographic and chronological context of access, use, and events relating to the crime under investigation.

- 60. Account activity may also provide relevant insight into the account owner's state of mind as it relates to the offenses under investigation. For example, information on the account may indicate the owner's motive and intent to commit a crime (e.g., information indicating a plan to commit a crime), or consciousness of guilt (e.g., deleting account information in an effort to conceal evidence from law enforcement).
- 61. Other information connected to an Apple ID may lead to the discovery of additional evidence. For example, the identification of apps downloaded from App Store and iTunes Store may reveal services used in furtherance of the crimes under investigation, such as banking institutions used to commit money laundering, or services used to communicate with co-conspirators. In addition, emails, instant messages, Internet activity, documents, and contact and calendar information can lead to the identification of co-conspirators and instrumentalities of the crimes under investigation.
- 62. Apple's servers are likely to contain stored electronic communications and information concerning subscribers and their use of Apple's services. In my training and experience, such information may constitute evidence of the crimes under investigation including information that can be used to identify the account's user or users.

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1 **CONCLUSION** 2 63. Based on the forgoing, I respectfully request that the Court issue the proposed 3 search warrant. Accordingly, by this Affidavit and Warrant, I seek authority for the 4 government to search all of the items specified in Section I of Attachments B (attached 5 hereto and incorporated by reference herein) to the Warrant, and specifically to seize all of 6 the data, documents, and records that are identified in Sections II to the same Attachments. 7 8 9 ANDREW CROPCHO, Affiant 10 Special Agent, Federal Bureau of Investigation 11 12 13 The above-named agent provided a sworn statement attesting to the truth of the 14 foregoing affidavit on the 1st day of April, 2022. 15 16 THE HONORABLE S. KATE VAUGHAN 17 United States Magistrate Judge 18 19 20 21 22 23 24 25 26 27 28

1 ATTACHMENT A-1 2 **Accounts to be Searched** 3 This warrant applies to information associated with the following accounts ("the 4 Google Accounts") that is stored at premises owned, maintained, controlled, or operated by 5 Google LLC, a company headquartered at 1600 Amphitheatre Parkway, Mountain View, CA 6 94043: 7 ivan@hashcoins.com (GOOGLE ACCOUNT 1); 8 ivan@burfa.com (GOOGLE ACCOUNT 2); 9 ivan.turygin@polybius.io (GOOGLE ACCOUNT 3); 10 turygin@gmail.com (GOOGLE ACCOUNT 4); 11 sergei@hashcoins.com (GOOGLE ACCOUNT 5); 12 sergei@burfa.com (GOOGLE ACCOUNT 6); 13 sergei.potapenko@polybius.io (GOOGLE ACCOUNT 7); 14 sergei.potapenko@gmail.com (GOOGLE ACCOUNT 8); 15 nikolay@hashcoins.com (GOOGLE ACCOUNT 9); 16 nikolay.pavlovskiy@burfa.com (GOOGLE ACCOUNT 10); 17 pavel@hashcoins.com (GOOGLE ACCOUNT 11); 18 pavel.tsihhotski@burfa.com (GOOGLE ACCOUNT 12); 19 pavel.tsihhotski@polybius.io (GOOGLE ACCOUNT 13); 20 stanislav.pavlov@hashcoins.com (GOOGLE ACCOUNT 14); 21 stanislav.pavlov@burfa.com (GOOGLE ACCOUNT 15); 22 vadim.tsvetikov@hashcoins.com (GOOGLE ACCOUNT 16); 23 vadim.tsvetikov@burfa.com (GOOGLE ACCOUNT 17); 24 vitali@hashcoins.com (GOOGLE ACCOUNT 18); 25 vitali@burfa.com (GOOGLE ACCOUNT 19); 26 anton.altement@polybius.io (GOOGLE ACCOUNT 20); 27 edgar.bers@polybius.io (GOOGLE ACCOUNT 21); 28 tatjana@burfa.com (GOOGLE ACCOUNT 22);

1	 margarita.burunova@hashcoins.com (GOOGLE ACCOUNT 23);
2	 dalmeronprojects@gmail.com (GOOGLE ACCOUNT 24);
3	• ecohousenetworks@gmail.com (GOOGLE ACCOUNT 25);
4	admin@hashcoins.com (GOOGLE ACCOUNT 26);
5	• info@hashcoins.com (GOOGLE ACCOUNT 27);
6	• info@burfa.com (GOOGLE ACCOUNT 28);
7	 info@polybius.io (GOOGLE ACCOUNT 29);
8	• invoices@hashcoins.com (GOOGLE ACCOUNT 30);
9	• invoices@burfa.com (GOOGLE ACCOUNT 31);
10	 microsoft@hashcoins.com (GOOGLE ACCOUNT 32);
11	• cb@hashcoins.com (GOOGLE ACCOUNT 33);
12	• licenses@hashcoins.com (GOOGLE ACCOUNT 34);
13	alerts.mining@burfa.com (GOOGLE ACCOUNT 35); and
14	• support@polybius.io (GOOGLE ACCOUNT 36).
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ATTACHMENT B-1

Particular Things to be Seized

I. Information to be disclosed by Google, LLC:

To the extent that the information described in Attachment A is within the possession, custody, or control of Google, regardless of whether such information is located within or outside of the United States, and including any emails, records, files, logs, or information that has been deleted but is still available to Google, or has been preserved pursuant to a request made under 18 U.S.C. § 2703(f), Google is required to disclose to the government for each account or identifier listed in Attachment A-1 the following information from April 4, 2020, through the present, unless otherwise indicated:

- a. All business records and subscriber information, in any form kept, pertaining to the Account, including:
 - 1. Names (including subscriber names, user names, and screen names);
 - 2. Addresses (including mailing addresses, residential addresses, business addresses, and email addresses, including alternate and recovery email addresses);
 - 3. Telephone numbers, including SMS recovery and alternate sign-in numbers;
 - 4. Records of session times and durations, and the temporarily assigned network addresses (such as Internet Protocol ("IP") addresses) associated with those sessions, including log-in IP addresses;
 - Telephone or instrument numbers or other subscriber numbers or identities, including any temporarily assigned network address, SMS recovery numbers, Google Voice numbers, and alternate sign-in numbers
 - 6. Length of service (including start date and creation IP) and types of service utilized;

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- 7. Means and source of payment (including any credit card or bank account number); and
- 8. Change history.
- b. All device information associated with the Account, including but not limited to, manufacture names, model numbers, serial number, media access control (MAC) addresses, international mobile equipment identifier (IMEI) numbers, FCC ID numbers, Android IDs, and telephone numbers;
- c. Records of user activity for each connection made to or from the Account(s), including, for all Google services, the date, time, length, and method of connection, data transfer volume, user names, source and destination IP address, name of accessed Google service, and all activity logs
- d. The contents of all emails associated with the account, including stored or preserved copies of emails sent to and from the account, draft emails, and deleted emails; attachments; the source and destination addresses associated with each email; the size, length, and timestamp of each email; and true and accurate header information including the actual IP addresses of the sender and recipients of the emails;
- e. Any records pertaining to the user's contacts, including: address books; contact lists; social network links; groups, including Google Groups to which the user belongs or communicates with; user settings; and all associated logs and change history;
- f. Any records pertaining to the user's calendar(s), including: Google Calendar events; Google Tasks; reminders; appointments; invites; and goals; the sender and recipients of any event invitation, reminder, appointment, or task; user settings; and all associated logs and change history;
- g. The contents of all text, audio, and video messages associated with the account, including Chat, Duo, Hangouts, Meet, and Messages (including SMS, MMS, and RCS), in any format and however initially transmitted, including,

- but not limited to: stored, deleted, and draft messages, including attachments and links; the source and destination addresses associated with each communication, including IP addresses; the size, length, and timestamp of each communication; user settings; and all associated logs, including access logs and change history;
- h. The contents of all media associated with the account in Google Photos, including: photos, GIFs, videos, animations, collages, icons, or other data uploaded, created, stored, or shared with the account, including drafts and deleted records; accounts with access to or which previously accessed each record; any location, device, or third-party application data associated with each record; and all associated logs of each record, including the creation and change history, access logs, and IP addresses.
- i. All maps data associated with the account, including Google Maps and Google Trips, including: all saved, starred, and privately labeled locations; search history; routes begun; routes completed; mode of transit used for directions; My Maps data; accounts and identifiers receiving or sending Location Sharing information to the account; changes and edits to public places; and all associated logs, including IP addresses, location data, and timestamps, and change history.
- j. All Location History and Web & App Activity indicating the location at which the account was active, including the source of the data, date and time, latitude and longitude, estimated accuracy, device and platform, inferences drawn from sensor data (such as whether a user was at rest, walking, biking, or in a car), and associated logs and user settings, including Timeline access logs and change and deletion history; and
- k. All Internet search and browsing history, and application usage history, including Web & App Activity, Voice & Audio History, Google Assistant, and Google Home, including: search queries and clicks, including transcribed or

1	recorded voice queries and Google Assistant responses; browsing history,
2	including application usage; bookmarks; passwords; autofill information;
3	alerts, subscriptions, and other automated searches, including associated
4	notifications and creation dates; user settings; and all associated logs and
5	change history.
6	Google is hereby ordered to disclose the above information to the government within 14 days
7	of issuance of this warrant.
8	II. Information to be seized by the government
9	All information described above in Section I that constitutes fruits, contraband,
10	evidence, and instrumentalities of violations of Title 18, United States Code, Section 1343
11	(Wire Fraud) and Title 18, United States Code, Section 1956, and occurring after April 2015,
12	for each of the Accounts listed on Attachment A, pertaining to the following matters:
13	a. Items, records, or information related to the operation of a
14	cryptocurrency cloud mining Ponzi scheme;
15	b. Items, records, or information related to cryptocurrency mining, the
16	advertisement, manufacture and sale of mining equipment, or the advertisement and sale of
17	cloud mining contracts;
18	c. Items, records, or information related to the termination of mining
19	contracts and the profitability of cloud mining;
20	d. Items, records, or information related to purchases of cloud mining
21	equipment, including communications with the companies Jeltan Trading, Dalmeron
22	Projects, Dalmeron Invest, Keleta UAB, Bitmain, Bitfury, and Inno3d;
23	e. Items, records, or information related to the transfer, purchase, sale, or
24	disposition of cryptocurrency;
25	f. Items, records, or information related to communications with
26	HASHFLARE or HASHCOINS investors, including complaints by investors or requests for
27	return of funds;
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1	g. Items, records, or information related to the advertisement of
2	HASHFLARE or HASHCOINS' services;
3	h. Items, records, or information related to the owners, operators,
4	employees, locations, assets, and business purpose of the companies HASHCOINS OU,
5	HASHCOINS TRADE OU, HASHCOINS LP, HASHFLARE LP, Burfa Capital OU, Burfa
6	Media OU, Burfa Real Estate OU, Burfa Tech OU, Burfa Trade OU, Burfa Invest OU,
7	Polybius Foundation OU, Polybius Tech OU, Polybius Ventures OU, Polybius Fintech
8	MidCo OU, Dalmeron Projects LP, Jeltan Trading, Dalmeron Invest, Keleta UAB, and
9	OSOM Finance (collectively, the "SUBJECT ENTITIES");
10	i. Items, records, or information related to the use, creation, or operation
11	of the "SUBJECT ENTITIES," including business plans and strategies, and the anticipated
12	success, failure, or general validity thereof;
13	j. Items, records, or information related to the operation of hashflare.io,
14	burfa.com, polybius.io, dalmeron.com, or hashcoins.com;
15	k. Items, records, or information concerning financial transactions
16	associated with the operation of the SUBJECT ENTITIES, including bank accounts held by
17	the SUBJECT ENTITIES, transfers of funds by the SUBJECT ENTITIES, expenditures of
18	money or wealth, bank statements and other financial statements, and cryptocurrency
19	holdings;
20	l. Items, records, or information related to cryptocurrency mining groups,
21	cryptocurrency public keys or addresses, cryptocurrency private keys, representations of
22	cryptocurrency wallets or their constitutive parts, to include "recovery seeds" and "root
23	keys," which may be used to regenerate a wallet.
24	m. Items, records, or information related to the salaries or earnings of
25	individuals employed by the SUBJECT ENTITIES.
26	n. Items, records, or information related to the payment or calculation of
27	recruitment bonuses paid to HASHFLARE and HASHCOINS investors.
28	

1	o. Items, records, or information related to receipt of investor money,
2	including the amount, purpose of the investment, and plans for spending that money.
3	p. Evidence indicating how and when the account was accessed or used, to
4	determine the geographic and chronological context of account access, use, and events
5	relating to the crime under investigation and to the email account owner.
6	q. Evidence indicating the account owner's state of mind as it relates to the
7	crime under investigation.
8	r. The identity of the person(s) who created or used the user ID, including
9	records that help reveal the whereabouts of such person(s).
10	
11	This warrant authorizes a review of electronically stored information, communications, other
12	records and information disclosed pursuant to this warrant in order to locate evidence, fruits,
13	and instrumentalities described in this warrant. The review of this electronic data may be
14	conducted by any government personnel assisting in the investigation, who may include, in
15	addition to law enforcement officers and agents, attorneys for the government, attorney
16	support staff, and technical experts. Pursuant to this warrant, the FBI may deliver a complete
17	copy of the disclosed electronic data to the custody and control of attorneys for the
18	government and their support staff for their independent review.
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ATTACHMENT A-2 This warrant applies to information associated with the following accounts (collectively, the "Apple Accounts") that is stored at premises owned, maintained, controlled, or operated by Apple Inc., a company headquartered at One Apple Park Way, Cupertino, California: • Sergei.potapenko@gmail.com (DSID 624556209) ("APPLE ACCOUNT 1") (believed to be used by SERGEI POTAPENKO); and Turygin@gmail.com (DSID 1931852295) ("APPLE ACCOUNT 2") (believed to be used by IVAN TURYGIN).

1 ||

ATTACHMENT B-2

I. Information to be disclosed by Apple Inc. ("Apple")

To the extent that the information described in Attachment A is within the possession, custody, or control of Apple, regardless of whether such information is located within or outside of the United States, and including any emails, records, files, logs, or information that has been deleted but is still available to Apple, or has been preserved pursuant to a request made under 18 U.S.C. § 2703(f), Apple is required to disclose for each account or identifier listed in Attachment A-2 the following information from March 12, 2021, through the present, unless otherwise indicated:

- a. All records or other information regarding the identification of the account, to include full name, physical address, telephone numbers, email addresses (including primary, alternate, rescue, and notification email addresses, and verification information for each email address), the date on which the account was created, the length of service, the IP address used to register the account, account status, associated devices, methods of connecting, and means and source of payment (including any credit or bank account numbers);
- b. All records or other information regarding the devices associated with, or used in connection with, the account (including all current and past trusted or authorized iOS devices and computers, and any devices used to access Apple services), including serial numbers, Unique Device Identifiers ("UDID"), Advertising Identifiers ("IDFA"), Global Unique Identifiers ("GUID"), Media Access Control ("MAC") addresses, Integrated Circuit Card ID numbers ("ICCID"), Electronic Serial Numbers ("ESN"), Mobile Electronic Identity Numbers ("MEIN"), Mobile Equipment Identifiers ("MEID"), Mobile Identification Numbers ("MIN"), Subscriber Identity Modules ("SIM"), Mobile Subscriber Integrated Services Digital Network Numbers ("MSISDN"), International Mobile Subscriber Identities ("IMSI"), and International Mobile Station Equipment Identities ("IMEI");
- c. The contents of all emails associated with the account from March 22, 2021, through the present, including stored or preserved copies of emails sent to and from the

- account (including all draft emails and deleted emails), the source and destination addresses associated with each email, the date and time at which each email was sent, the size and length of each email, and the true and accurate header information including the actual IP addresses of the sender and the recipient of the emails, and all attachments;
- d. The contents of all instant messages associated with the account from March 22, 2021, through the present, including stored or preserved copies of instant messages (including iMessages, SMS messages, and MMS messages) sent to and from the account (including all draft and deleted messages), the source and destination account or phone number associated with each instant message, the date and time at which each instant message was sent, the size and length of each instant message, the actual IP addresses of the sender and the recipient of each instant message, and the media, if any, attached to each instant message;
- e. The contents of all files and other records stored on iCloud, including all iOS device backups, all Apple and third-party app data, all files and other records related to iCloud Mail, iCloud Photo Sharing, My Photo Stream, iCloud Photo Library, iCloud Drive, iWork (including Pages, Numbers, Keynote, and Notes), iCloud Tabs and bookmarks, and iCloud Keychain, and all address books, contact and buddy lists, notes, reminders, calendar entries, images, videos, voicemails, device settings, and bookmarks;
- f. All activity, connection, and transactional logs for the account (with associated IP addresses including source port numbers), including FaceTime call invitation logs, messaging and query logs (including iMessage, SMS, and MMS messages), mail logs, iCloud logs, iTunes Store and App Store logs (including purchases, downloads, and updates of Apple and third-party apps), My Apple ID and iForgot logs, sign-on logs for all Apple services, Game Center logs, Find My iPhone and Find My Friends logs, logs associated with web-based access of Apple services (including all associated identifiers), and logs associated with iOS device purchase, activation, and upgrades;

1	e. Items, records, or information related to the transfer, purchase, sale, or
2	disposition of cryptocurrency;
3	f. Items, records, or information related to communications with
4	HASHFLARE or HASHCOINS investors, including complaints by investors or requests for
5	return of funds;
6	g. Items, records, or information related to the advertisement of
7	HASHFLARE or HASHCOINS' services;
8	h. Items, records, or information related to the owners, operators,
9	employees, locations, assets, and business purpose of the companies HASHCOINS OU,
10	HASHCOINS TRADE OU, HASHCOINS LP, HASHFLARE LP, Burfa Capital OU, Burfa
11	Media OU, Burfa Real Estate OU, Burfa Tech OU, Burfa Trade OU, Burfa Invest OU,
12	Polybius Foundation OU, Polybius Tech OU, Polybius Ventures OU, Polybius Fintech
13	MidCo OU, Dalmeron Projects LP, Jeltan Trading, Dalmeron Invest, Keleta UAB, and
14	OSOM Finance (collectively, the "SUBJECT ENTITIES");
15	i. Items, records, or information related to the use, creation, or operation
16	of the "SUBJECT ENTITIES," including business plans and strategies, and the anticipated
17	success, failure, or general validity thereof;
18	j. Items, records, or information related to the operation of hashflare.io,
19	burfa.com, polybius.io, dalmeron.com, or hashcoins.com;
20	k. Items, records, or information concerning financial transactions
21	associated with the operation of the SUBJECT ENTITIES, including bank accounts held by
22	the SUBJECT ENTITIES, transfers of funds by the SUBJECT ENTITIES, expenditures of
23	money or wealth, bank statements and other financial statements, and cryptocurrency
24	holdings;
25	1. Items, records, or information related to cryptocurrency mining groups,
26	cryptocurrency public keys or addresses, cryptocurrency private keys, representations of
27	cryptocurrency wallets or their constitutive parts, to include "recovery seeds" and "root
28	keys," which may be used to regenerate a wallet.

1	m. Items, records, or information related to the salaries or earnings of
2	individuals employed by the SUBJECT ENTITIES.
3	n. Items, records, or information related to the payment or calculation of
4	recruitment bonuses paid to HASHFLARE and HASHCOINS investors.
5	o. Items, records, or information related to receipt of investor money,
6	including the amount, purpose of the investment, and plans for spending that money.
7	p. Evidence indicating how and when the account was accessed or used, to
8	determine the geographic and chronological context of account access, use, and events
9	relating to the crime under investigation and to the email account owner.
10	q. Evidence indicating the account owner's state of mind as it relates to the
11	crime under investigation.
12	r. The identity of the person(s) who created or used the user ID, including
13	records that help reveal the whereabouts of such person(s).
14	
15	This warrant authorizes a review of electronically stored information, communications, other
16	records and information disclosed pursuant to this warrant in order to locate evidence, fruits,
17	and instrumentalities described in this warrant. The review of this electronic data may be
18	conducted by any government personnel assisting in the investigation, who may include, in
19	addition to law enforcement officers and agents, attorneys for the government, attorney
20	support staff, and technical experts. Pursuant to this warrant, the FBI may deliver a complete
21	copy of the disclosed electronic data to the custody and control of attorneys for the
22	government and their support staff for their independent review.
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1	<u>AFFIDAVIT</u>
2	
3	STATE OF WASHINGTON)
4	COUNTY OF KING) ss
5	I, Andrew Cropcho, being duly sworn, hereby depose and state as follows:
6	INTRODUCTION AND AGENT BACKGROUND
7	I am a Special Agent with the Federal Bureau of Investigation ("FBI") and
8	have been since May of 2018. I am currently assigned to the Seattle Field Office. My
9	primary duties include investigating violations of Federal law, including corporate fraud,
10	securities fraud, government program fraud, and healthcare fraud. Part of those duties
11	include investigating instances of wire fraud being used for financial gain at the expense of
12	others. Before my career as an FBI Special Agent I was employed as a Certified Public
13	Accountant for over three years and, as part of my employment, I examined financial
14	information of clients to determine their accuracy, reliability, and sources.
15	2. The facts set forth in this Affidavit are based on my own personal knowledge;
16	knowledge obtained from other individuals during my participation in this investigation,
17	including other law enforcement personnel; review of documents and records related to this
18	investigation; communications with others who have personal knowledge of the events and
19	circumstances described herein including, but not limited to, the victims in this investigation;
20	and information gained through my training and experience. Because this Affidavit is
21	submitted for the limited purpose of establishing probable cause in support of the application
22	for a search warrant, it does not set forth each and every fact that I or others have learned
23	during the course of this investigation.
24	PURPOSE OF AFFIDAVIT
25	3. I make this affidavit in support of an application for a search warrant for
26	information associated with certain accounts that are stored at premises controlled by Google

LLC ("Google"), located at 1600 Amphitheater Parkway in Mountain View. The

information to be searched is described in the following paragraphs and in Attachment A, 2 which is incorporated herein. 3 4. This affidavit is made in support of an application for a search warrant 4 pursuant to Title 18, United States Code, Sections 2703(a), 2703(b)(1)(A) and 2703(c)(1)(A) 5 to require Google to disclose to the government copies of the information, including the content of communications, further described in Section I of Attachment B, pertaining to the 6 7 following accounts: 8 ivan@hashcoins.com (SUBJECT ACCOUNT 1) 9 ivan@burfa.com (SUBJECT ACCOUNT 2) ivan.turygin@polybius.io (SUBJECT ACCOUNT 3) 10 turygin@gmail.com (SUBJECT ACCOUNT 4) 11 sergei@hashcoins.com (SUBJECT ACCOUNT 5) 12 sergei@burfa.com (SUBJECT ACCOUNT 6) 13 14

sergei.potapenko@polybius.io (SUBJECT ACCOUNT 7) sergei.potapenko@gmail.com (SUBJECT ACCOUNT 8) nikolay@hashcoins.com (SUBJECT ACCOUNT 9) nikolay.pavlovskiy@burfa.com (SUBJECT ACCOUNT 10) pavel@hashcoins.com (SUBJECT ACCOUNT 11) pavel.tsihhotski@burfa.com (SUBJECT ACCOUNT 12) pavel.tsihhotski@polybius.io (SUBJECT ACCOUNT 13) stanislav.pavlov@hashcoins.com (SUBJECT ACCOUNT 14) stanislav.pavlov@burfa.com (SUBJECT ACCOUNT 15) vadim.tsvetikov@hashcoins.com (SUBJECT ACCOUNT 16) vadim.tsvetikov@burfa.com (SUBJECT ACCOUNT 17) vitali@hashcoins.com (SUBJECT ACCOUNT 18) vitali@burfa.com (SUBJECT ACCOUNT 19) vitali pavlov@polybius.io (SUBJECT ACCOUNT 20) anton.altement@polybius.io (SUBJECT ACCOUNT 21) edger.bers@burfa.com (SUBJECT ACCOUNT 22)

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edgar.bers@polybius.io (SUBJECT ACCOUNT 23)
tatjana@burfa.com (SUBJECT ACCOUNT 24)
margarita.burunova@hashcoins.com (SUBJECT ACCOUNT 25)
dalmeronprojects@gmail.com (SUBJECT ACCOUNT 26)
ecohousenetworks@gmail.com (SUBJECT ACCOUNT 27)
admin@hashcoins.com (SUBJECT ACCOUNT 28)
admin@burfa.com (SUBJECT ACCOUNT 29)
info@hashcoins.com (SUBJECT ACCOUNT 30)
info@burfa.com (SUBJECT ACCOUNT 31)
info@polybius.io (SUBJECT ACCOUNT 32)
invoices@hashcoins.com (SUBJECT ACCOUNT 33)
invoices@burfa.com (SUBJECT ACCOUNT 34)
azure@hashcoins.com (SUBJECT ACCOUNT 35)
microsoft@hashcoins.com (SUBJECT ACCOUNT 36)
cb@hashcoins.com (SUBJECT ACCOUNT 37)
licenses@hashcoins.com (SUBJECT ACCOUNT 38)
alerts.mining@burfa.com (SUBJECT ACCOUNT 39)
support@polybius.io (SUBJECT ACCOUNT 40)

- 5. (hereinafter, collectively the "SUBJECT ACCOUNTS"). Upon receipt of the information described in Section I of Attachment B, government-authorized persons will review that information to locate the items described in Section II of Attachment B. This warrant is requested in connection with an on-going investigation in this district by the FBI.
- 6. Based on my training and experience, and the facts as set forth in this affidavit, there is probable cause to believe that violations of Title 18, United States Code, Section 1343 (Wire Fraud) have been committed by IVAN TURYGIN and SERGEI POTAPENKO, individually, and by and through the use of their companies HASHCOINS OU (hereinafter "HASHCOINS"), HASHCOINS TRADE OU, HASHCOINS LP, HASHFLARE LP (hereinafter "HASHFLARE"), Burfa Capital OU, Burfa Media OU, Burfa Real Estate OU,

Burfa Tech OU, Burfa Trade OU, Burfa Invest OU (collectively, the "BURFA Entities"), Polybius Foundation OU, Polybius Tech OU, Polybius Ventures OU, Polybius Fintech MidCo OU (collectively, "POLYBIUS"), Dalmeron Projects LP, and Ecohouse Networks LP, along with identified key employees of the same companies. There is also probable cause to search the information described in Attachment A, for evidence, instrumentalities, or contraband of these crimes, as described in Attachment B.

JURISDICTION

- 7. This Court has jurisdiction to issue the requested warrant because it is "a court of competent jurisdiction" as defined by 18 U.S.C. § 2711. 18 U.S.C. §§ 2703(a), (b)(1)(A) & (c)(1)(A). Specifically, the Court is "a district court of the United States . . . that has jurisdiction over the offense being investigated." 18 U.S.C. § 2711(3)(A)(i).
- 8. Pursuant to 18 U.S.C. § 2703(g), the presence of a law enforcement officer is not required for the service or execution of this warrant.
- 9. This warrant application is to be presented electronically pursuant to Local Criminal Rule CrR 41(d)(3).

BACKGROUND ON VIRTUAL CURRENCY AND MINING

- 10. Virtual currency (also known as cryptocurrency) is an asset that can be exchanged directly person to person, through a virtual currency exchange, or through other intermediaries. It can be used to buy goods and services, exchanged for "fiat currency" (currency established by government regulation or law) or other virtual currency, or held as an investment, among other applications.
- 11. Virtual currency is generally not issued by any government or bank. Rather, it is frequently generated and controlled through software operating on a decentralized, peer-to-peer ("P2P") network of computers across the world (some types of virtual currency, however, are generated and controlled through software operating on a centralized network of computers across the world).

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12.

Bitcoin Cash, and Monero. Bitcoin,¹ the most popular form of virtual currency, can be generated through mining. According to Bitcoin.org, "Bitcoin mining is the process of making computer hardware do mathematical calculations for the Bitcoin network to confirm transactions and increase security. As a reward for their services, Bitcoin miners can collect transaction fees for the transactions they confirm, along with newly created bitcoins."

13. Bitcoin mining can be conducted locally on a user's computer or other

There are thousands of virtual currencies in use, including Bitcoin, Ethereum,

- 13. Bitcoin mining can be conducted locally on a user's computer or other computer hardware, or can be conducted on another's system via the cloud. According to the Santa Clara Law School High Technology Journal: "Cloud mining is an economic arrangement whereby a person pays another person or entity to engage in cryptocurrency mining on their behalf and receives the transaction fees, cryptocurrency or a portion thereof that is generated from such mining efforts."
- 14. One measure for determining the effectiveness or processing power of a mining operation is to calculate the operation's hash rate. According to Bitcoin.org: "The hash rate is the measuring unit of the processing power of the Bitcoin network. The Bitcoin network must make intensive mathematical operations for security purposes. When the network reached a hash rate of 10 Th/s, it meant it could make 10 trillion calculations per second."
- 15. Bitcoin utilizes "public key cryptography," a mathematical algorithm that generates a pair of unique, corresponding keys: the "public key" and the "private key." These components form the "public address," which is used to send and receive bitcoins and can be shared. A public address is akin to a bank account number, and a private key is akin to a Personal Identification Number ("PIN") or password. Only the holder of a public address's private key can authorize transfers of virtual currency from that public address to another public address.

²⁷

¹ Since Bitcoin is both a virtual currency and a protocol, capitalization differs. Accepted practice is to use "Bitcoin" (singular with an uppercase letter B) to label the protocol, software, and community, and "bitcoin" (with a lowercase letter b) to label units of the virtual currency. That practice is adopted here.

- 16. Many virtual currencies operate via a "blockchain," a record (or ledger) of every transaction ever conducted that is distributed throughout the computer network (as opposed to being maintained by any single administrator or entity). As to bitcoins, although the public addresses of those engaging in virtual currency transactions are recorded on a blockchain, the identities of the individuals or entities behind the public addresses are not recorded on these public ledgers. If, however, an individual or entity is linked to a public address, it may be possible to determine what transactions were conducted by that individual or entity. Bitcoin transactions are therefore sometimes described as "pseudonymous," meaning that they are partially anonymous.
- 17. Virtual currency users typically employ a "wallet," a tool that can be used to manage public and private keys, interface with a blockchain, and to send or receive virtual currency. Wallets vary widely in terms of their format and technological sophistication. One variety, known as "hosted" (or "custodial") wallets, are virtual currency wallets controlled by a third-party—often, a company with a cloud-based, encrypted wallet platform that may be hosted on the company's servers. Users of hosted wallets may be able to access the company's platform through various digital devices, much like a traditional online banking experience. Hosted wallet providers include virtual currency exchanges, which allow their customers, for a fee, to exchange virtual currency for other virtual currencies and/or fiat currencies.
- 18. A more detailed description of virtual currencies, blockchains, and law enforcement techniques for investigating virtual currency transactions, is included below.

STATEMENT OF PROBABLE CAUSE

A. Summary of Investigation

19. The FBI is investigating whether two Estonian residents, IVAN TURYGIN² and SERGEI POTAPENKO, illegally operated a Ponzi scheme, in violation of 18 U.S.C. § 1343, by fraudulently inducing individuals to invest in cryptocurrency mining.

² IVAN TURYGIN's name is also spelled Ivan Turögin.

- 20. Individuals can earn cryptocurrency by engaging in mining, which involves using computing power to solve a complicated algorithm to verify and record payments on the blockchain. Individuals are rewarded for this task by receiving newly created units of a cryptocurrency. Cryptocurrency mining typically involves the use of high-powered computers and the expenditure of large amounts of electricity.
- 21. HASHFLARE, incorporated in the UK and based in Estonia, claimed that it was engaged in cloud mining, using a cloud based platform to mine Bitcoin and alternative cryptocurrency coins. HASHCOINS, incorporated and based in Estonia, assisted HASHFLARE in this endeavor, providing technical support, development and marketing of HASHFLARE and its subdomains. In exchange for a monetary investment, individuals were told that they would receive a portion of the mining proceeds.
- 22. In July 2018, HASHFLARE stopped paying investors annual returns, claiming that cryptocurrency mining was no longer profitable. According to its terms of service, HASHFLARE informed investors that it would stop cryptocurrency mining "if the Maintenance and Electricity Fees [are] larger than the Payout." Specifically, according to HASHFLARE's terms, "If mining remains unprofitable for 21 consecutive days the Service is permanently terminated . . . [and] Payouts and Fees will also be temporarily stopped."
- 23. Investors contend that, at the time HASHFLARE terminated its services, cryptocurrency mining was, in fact, profitable. After mining was terminated, investors, including those located in the United States, began identifying red flags which led them to believe that HASHFLARE was a Ponzi scheme that was not engaged in cryptocurrency mining.
- 24. In June 2019, Estonia's Cyber Crime Bureau notified the FBI that it was investigating whether IVAN TURYGIN and SERGEI POTAPENKO were operating a Ponzi scheme. As of June 20, 2019, the Estonian authorities identified approximately \$120 million³ in losses sustained by HASHFLARE investors.

³ In this Affidavit, all references to \$ refer to US Dollars.

A. <u>HASHFLARE & HASHCOINS</u>

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a. Incorporation and Ownership

25. HASHFLARE and HASHCOINS were incorporated in Estonia and the United Kingdom on the dates listed in the below chart.

Date	Name Form Beneficia		Directors or Beneficial Owners	Current Name	Prior Names	
6/13/13	HASHCOINS OU	Estonia	Private Limited Company	TURYGIN & POTAPENKO	Burfa Tech OU	N/A
11/26/14	HASHCOINS TRADE OU	Estonia	Private Limited Company	TURYGIN & POTAPENKO	Burfa Trade OU	N/A
12/14/15	HASHFLARE LP	UK	Limited Partnership	Datacom Solutions Ltd & Redbone Investments Ltd.	HASHFLARE LP	Fast Consult Trade LP & HASHCOINS LP

26. HASHFLARE maintained the website hashflare.io while HASHCOINS maintained the website www.hashcoins.com. According to HASHCOINS' and HASHFLARE's websites, POTAPENKO is identified as a co-founder and CEO of the entities. According to public reporting, TURYGIN is a co-founder and Business Development Chairman of HASHCOINS. TURYGIN is also identified as a co-founder of HASHFLARE.

b. Business Operations

27. Beginning on or before April 18, 2015, HASHFLARE offered cloud mining services on its website. According to its website, HASHFLARE advertised the following: "Our service makes cryptocurrency mining available to every user. You no longer need to buy expensive equipment and spend your time setting up miners. Just select your desired capacity and earn income!" On another portion of its website, HASHFLARE advertised that "Cloud mining offers a unique option for mining with a low cost of entry as well as minimal risk and expense, which is opposite to traditional models of mining that involve procurement, maintenance and configuration of highly specialized software."

- 28. HASHFLARE advertised that it conducted this mining in collaboration with HASHCOINS. On its website, HASHFLARE explained that it offered "a new range of cloudmining services brought to you by the HASHCOINS team of cryptomining experts." On its website, HASHCOINS claimed that it was "an Estonian based cryptocurrency mining hardware manufacturer and cloud hosted mining service provider." HASHCOINS advertised that its users could purchase cloud mining contracts from HASHFLARE, claiming that HASHFLARE users could mine cryptocurrency using HASHCOINS' datacenters. In its terms of service, HASHFLARE stated that "HASHCOINS OU provides technical support, development and marketing of HASHFLARE and its subdomains."
- 29. HASHFLARE sold cloud mining contracts, allowing users to mine cryptocurrency through HASHFLARE in exchange for a return. On its website HASHFLARE explained that a user could "purchas[e] part of the mining power of hardware hosted and owned by a Cloud Mining services provider," which "configur[es] the hardware, maintain[s] uptime and select[s] the most efficient and reliable [mining] pools." For example, on April 18, 2015, for \$9.95, a user could buy one million hashrate ("one million hash per second" or "1 MH/s") from HASHFLARE. For this rate, HASHFLARE advertised a "100% Scrypt Miner," automatic accruals in Bitcoin, and a daily maintenance fee of \$0.01 per 1/MH/s.
- 30. HASHFLARE's website advertised a tool that could be used to calculate the approximate amount of profit a user would get depending on the amount of hashrate they purchased. The user would then have the option to automatically reinvest that profit or withdraw the profit if their balance was above a certain minimum threshold, which fluctuated between 0.5 bitcoin to 0.01 bitcoin throughout the existence and operation of HASHFLARE.
- 31. In addition to earning funds through cloud mining, HASHFLARE users also earned funds by recruiting others to purchase HASHFLARE contracts. HASHFLARE advertised a referral program, informing users that "as a referrer, you are eligible to receive 10% referral commission bonus for every purchase made by any of your referrals, excluding reinvest and balance purchases." As a result, HASHFLARE users could make money each

time one of their referred friends, family members or acquaintances purchased cloud mining contracts.

- 32. A number of individuals, including those operating in the Western District of Washington purchased mining contracts from HASHFLARE. According to financial records obtained from Fedwire, a funds transfer system operated by the United States Federal Reserve Banks, at least \$2.5 million was transferred to accounts held by HASHCOINS for what appear to be investments in HASHFLARE (examples of descriptions accompanying the transfer of money were: "HASHFLARE.io Invoice..."; "Investments..."; and "...payment for mining services").
- 33. According to bank records obtained from Latvia, approximately \$11 million was transferred into an account held by HASHFLARE at Latvijas Pasta Banka. These transfers were made in the names of various individuals, and often referenced the terms "Invoice" and "Hashrate." As a result, I believe that these payments were made to purchase cloud mining contracts from HASHFLARE. For example, on January 31, 2017, F.R.E. transferred \$1,708 to HASHFLARE's account, referencing "Invoice 593395 Hashflare.io SHA-256 HASHRATE 15." Similarly, on March 6, 2017, A.K. transferred \$5,792.72 to HASHFLARE's account, referencing "Invoice .673156 (60TH/S SHA-256 hashrate)."
- 34. Additionally, according to information obtained from a group of approximately 800 investors, a representative of which contacted law enforcement, between initial investments and re-investments of stated profits, they invested a total of \$7.5 million. It was not readily apparent how much of the \$7.5 million was contained within the amounts previously mentioned above.

c. Collapse of Mining Operations

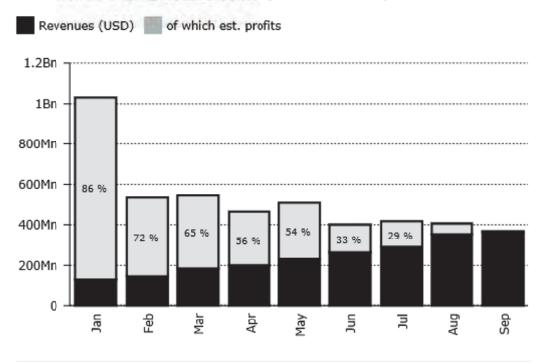
35. In or around June of 2018, HASHFLARE made a number of changes to its operations. For example, HASHFLARE changed its terms of service that shortened the length of all Bitcoin mining contracts from "lifetime" contracts to "one year" contracts. Functionally speaking, under lifetime contracts purchased hashrates did not expire, whereas

- 36. In or around July 2018, HASHFLARE also required all users to submit "Know Your Customer" identification before they could continue using services offered on the platform. In effect, these additional procedures reduced the ability of users to withdraw funds earned through mining. On online forums, users complained that, even after they submitted the necessary documentation, HASHFLARE was taking weeks or months to verify their identities and pay balances. Other users complained that they never received their requested balances.
- 37. Finally, on July 20, 2018, HASHFLARE announced that Bitcoin mining had been unprofitable for 28 days as of July 18, 2018 and, per clause 5.5 of its Terms of Service, all Bitcoin mining SHA-256 contracts were suspended. According to its terms of service, HASHFLARE informed investors that it would stop cryptocurrency mining "if the Maintenance and Electricity Fees [are] larger than the Payout." Specifically, according to HASHFLARE's terms, "If mining remains unprofitable for 21 consecutive days the Service is permanently terminated . . . [and] Payouts and Fees will also be temporarily stopped."
- 38. Interviews of three HASHFLARE investors, F.M., B.J., and F.W., revealed that it was not possible to make any withdrawals once the Bitcoin mining contracts were suspended, which held true through the dates of the interviews that took place in or around September of 2019. Since then, there has been no indication from known victims that any of the money invested was recoverable from HASHFLARE.
- 39. Since HASHFLARE suspended its contracts, investors, including those located in the United States, began identifying red flags which led them to believe that HASHFLARE was a Ponzi scheme that was not engaged in cryptocurrency mining. Instead, they believed that HASHFLARE was profiting on fluctuations in cryptocurrency exchange rates, using those gains and new investment proceeds to repay earlier investors. For example, investors visited HASHFLARE's business address in Estonia, which did not appear to house a server farm or computing equipment consistent with cryptocurrency mining.

Additionally, according to these investors, the rates charged by HASHFLARE for maintenance and electricity were above market average, and pools that were used to mine did not produce the expected output.

40. Diar, which publishes a digital assets and regulations newsletter, reported that while bitcoin mining was profitable for the first six months of 2018, with 2018 revenues exceeding 2017 revenues by \$1.4 billion, as of the end of August and the beginning of September, bitcoin mining was becoming unprofitable.⁴ According to Diar, increases in electricity costs and mining difficulty (increased hashrate) have led to this unprofitability. For example, a chart compiled by Dial is referenced below:

2018: Miners Paying Retail Electricity Prices Now Unprofitable...



Notes: Profit Estimates Using S9 Miners & \$0.1/kWh, No Pool Fees or Hardware Costs. The chart is illustrates profits if all miners paid retail electricity prices.

⁴ Diar, Bitcoin Miner Revenues Near \$5 Billion but Profitability Dwindles, Volume 2, Issue 40, (Oct. 8, 2018), available at https://diar.co/volume-2-issue-40/.

- 41. While Diar projected that mining did not become unprofitable until late August and early September 2018, HASHFLARE contended that its mining operations became unprofitable in late June 2018. However, HASHFLARE's operations may be more costly than those profiled by Diar, which did not take pool fees or hardware costs into account. HASHFLARE's terms of service provide that users must pay the following maintenance fees: "hardware setup, data center rent, Mining Pool testing, staff salaries, future planning and proofing, software development, exchange of used and out of order parts and other expenditures required to render the service on a best-effort basis."
- 42. The FBI has been investigating whether HASHFLARE and HASHCOINS engaged in sufficient cryptocurrency mining to service the contracts that had been purchased. To do so, I have reviewed analysis conducted by Estonian authorities who analyzed 22,935 transfer chains related to HASHFLARE payout wallets to determine if payouts to investors were coming from mining pools, which would be the expected source of payouts. Based on their analysis, most of the payouts came from the wallets where Bitcoin deposits were received, and only 0.8% of payouts came from mining pools. As a result, it appears that HASHFLARE may not have been engaged in substantial cryptocurrency mining, as previously advertised.
- 43. The FBI has also been investigating whether HASHFLARE and HASHCOINS possessed sufficient cryptocurrency mining equipment, in light of the number of contracts that had been purchased, and have determined the following.
- 44. On its website, HASHFLARE claimed that, when the company began in 2015, it conducted cloud mining using equipment obtained from HASHCOINS. As referenced above, investors questioned whether HASHCOINS had the capability to mine cryptocurrency, since they did not appear to have a large server location (or at least none was found). Additionally, in 2014 and 2015, HASHCOINS initially sold mining equipment, to be operated by the purchasing user. However, during that time frame, HASHCOINS claimed that it experienced supply disruptions frustrating their ability to supply Bitcoin mining equipment. On online forums, HASHCOINS users complained that purchased

mining equipment never arrived or that HASHCOINS claimed that shipments were substantially delayed. And while some users stated they received less powerful equipment produced by HASHCOINS, users complained that orders for more powerful mining equipment were left unfulfilled and unrefunded. In response, HASHCOINS offered its customers the opportunity to invest in HASHFLARE's cloud mining services, instead. Investors questioned whether this transition was intentional, to ensure that additional investors sent funds to HASHFLARE, and whether HASHCOINS ever had the ability to produce the more sophisticated cloud mining equipment advertised on its website.

- 45. Notably, from at least December 2015 until September 2016, HASHCOINS advertised cryptocurrency mining equipment for sale on its website. However, as of October 2016, despite the above mentioned orders from users, HASHCOINS advertised on its website that "In 2015 we have changed our business model from B2C [sales to customers] to B2B [sales to businesses], working with business customers only as we mostly keep the hardware for the needs of HashFlare."
- 46. Later in its operations, HASHFLARE claimed that it was purchasing cryptocurrency mining equipment from other companies, instead of sourcing its supply from HASHCOINS.
- 47. Beginning on or before June 4, 2018, HASHFLARE appears to have advertised on its website, albeit in broken English, that it uses "equipment for mining" obtained from "Bitmain, Bitfury, Inno3d, and others." Bitmain, Bitfury, and Inno3d each manufacture cryptocurrency mining equipment. Because of the broken English, it is difficult to determine when HASHFLARE started using mining equipment supplied by these companies, but it appears that HASHFLARE advertised that it acquired this equipment in 2016.⁵

⁵ The language states: "HashFlare is a cloud mining service created by the specialists from HashCoins in 2015. In a short time, HashFlare became one of the largest providers of computational power for mining bitcoin, litecoin, ethereum and other cryptocurrencies. From 2016, HashFlare is an independent company. The variety of equipment that is used for mining was significantly increased on the account such companies as Bitmain, Bitfury, Inno3d and others."

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- 48. According to banking records obtained to date,⁶ HASHCOINS first transferred funds to Bitfury on August 14, 2017, with another transfer of more than \$900,000 in funds occurring on October 4, 2017. Records from Bitfury show that deliveries were made on October 16, 2017 and November 21, 2017.
- 49. Additionally, according to banking records, from January until September 2018, Burfa Media OU (described in further detail below) transferred \$12.3 million to Ask Technology Group Limited, which appears to sell Inno3d products, a cryptocurrency mining equipment manufacturer. The subject lines for each payment listed "Mining Systems" or "P106-090 Systems"—associated with cryptocurrency mining. Given the timing, it's unclear whether these systems were ever used in connection with HASHFLARE's operations.
- 50. Additionally, emails were exchanged between POTAPENKO or TURYGIN and representatives at Bitmain, Bitfury, and Inno3d. According to information obtained from Google, POTAPENKO and TURYGIN communicated with representatives from these companies during the following time periods using the following email addresses:

POTAPENKO and TURYGIN Accounts	Communicating With	Time Frame
sergei@hashcoins.com	Bitmain	9/15-3/18
Charles and Control of the Control o	Bitfury	1/16-2/16
	Inno3d	12/17-1/19
ivan@hashcoins.com	Bitfury	6/17-1/19
sergei.potapenko@gmail.com	Bitfury	3/16-3/16
ivan@burfa.com	Bitfury	7/18-8/18
	Inno3d	12/17-1/19

51. However, HASHFLARE was advertising and selling mining contracts well before these equipment purchases from Bitfury and Inno3d. Based on financial records analyzed to date, users appeared to have begun transferring funds to HASHCOINS' bank account to purchase HASHFLARE mining contracts in 2016 and 2017. For example, on April 7, 2017, a transfer was made with the accompanying description: "OUR PS1704077754142 Purpose: SHA-256 HASHRATE INVOICE #771551." Those same

⁶ The FBI is continuing to gather financial information related to this case and has, so far, obtained records from Latvia, Estonia, and the United States relating to HASHFLARE and HASHCOINS, among other entities.

- financial records provide 28 payments made to the same HASHCOINS bank account, totaling approximately \$200,000, before any known delivery of mining equipment was made by Bitfury to HASHFLARE. Based on the above, the FBI is investigating whether HASHFLARE was soliciting and collecting investments for services it was not yet able to perform.
- 52. Between at least August 2017 and June 2018, HASHFLARE has also transferred more than € 25 million to CryptoPay Ltd., a UK company that sells Bitcoin, purchases Bitcoin in exchange for fiat currency, and sells cards that can be loaded with cryptocurrency. For example, on August 8, 2017, HASHFLARE transferred \$250,000 to CryptoPay for "digital assets purchase." Again, on August 17, 2017 HASHFLARE transferred an additional \$250,000 for "digital assets purchase." These payments continued through at least June 7, 2018, when HASHFLARE transferred \$800,000, also for "digital assets purchase." Based on these purchases, and the payment references, the FBI is investigating whether HASHFLARE was paying its investors using bitcoins purchased from CryptoPay, rather than mining bitcoins as advertised.
- 53. Furthermore, based on my training and experience, and information gained during the course of this investigation, I know that Ponzi schemes operate by recruiting others, paying earlier investors with funds transferred by later investors. Ponzi schemes often involve recruitment bonuses, incentivizing earlier investors to recruit friends and family members so that funds are available to pay earlier members. As described above, HASHFLARE advertised a referral program, paying earlier investors 10% bonuses based on cloud mining contracts purchased by those they referred.
- 54. HASHFLARE and HASHCOINS have stopped selling any mining contracts and, as described below, its founders and employees appear to have moved to successor companies that continue to operate in the cryptocurrency space. Prior investors have not been able to recoup their funds and many have been unable to transfer funds held in their accounts.

1 || 55. I submit there is probable cause to believe HASHFLARE and HASHCOINS 2 operated as a Ponzi scheme for at least the following reasons: (1) before its collapse, 3 HASHFLARE appears to have been in financial distress, as evidenced by its unilateral 4 conversion of mining contracts from lifetime contracts to year-long contracts, its use of KYC 5 requirements to delay users' withdrawal of funds from their accounts, and its termination of mining contracts during a time when industry press considered bitcoin mining to be 6 profitable; (2) HASHCOINS' questionable ability to manufacture cryptocurrency mining 8 equipment, as evidenced by its 2014-15 decision to not fulfill equipment orders and instead convert purchase contracts to HASHFLARE cloud mining contracts; (3) Estonian law 10 enforcement's analysis that HASHFLARE wasn't receiving substantial payouts from mining 11 pools, sufficient to pay its investors; (4) HASHFLARE's purchase of mining equipment only 12 later in its operations, beginning at the earliest in 2016 (according to its website) or 2017 13 (according to banking information); (5) HASHFLARE's apparent purchase of "digital 14 assets" from CryptoPay, which, among other items, sells Bitcoin, suggesting that 15 HASHFLARE may be purchasing cryptocurrency rather than mining it; (6) HASHFLARE's 16 inherent structure, including its referral program and lack of transparency regarding its 17 mining pools, which is a common structure evidenced in Ponzi schemes; and (7) as described 18 in further detail below, HASHFLARE's dissolution and the subsequent transition of its 19 employees and co-founders, who joined new companies that continue to operate in the 20 cryptocurrency space.

d. HASHCOINS' Use of Google Services

- 56. According to information obtained from Google, HASHCOINS uses the email domain @hashcoins.com, which is hosted by Google. HASHCOINS is a G Suite client, a Google product that provides cloud computing, productivity, and collaboration tools for business clients.
- 57. The domain @hashcoins.com was created on April 27, 2017, listing two contact emails for POTAPENKO—sergei@hashcoins.com and sergei.potapenko@gmail.com. As of February 2020, HASHCOINS used the Google

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services Google Calendar, Google Drive, Google Docs, Gmail, Google+, Google Hangouts, Groups for Business, Hangouts Chat, Jamboard Service, Keep, Sites, and Tasks.

58. As of February 2020, there were fifteen email addresses associated with the domain @hashcoins.com.

Subscriber Name	e		Last Login	Known Role ⁷	
HASHCOINS Admin	admin@hashcoins.com	N	5/15/19	Administrator of Account	
Microsoft Azure	azure@hashcoins.com	N	11/19/18	HASHFLARE hosts its website at Microsoft	
Microsoft Azure 2	microsoft@hashcoins.com	N	10/12/18		
Chargeback Check	cb@hashcoins.com	N	12/10/19	Believed to refer to payments with insufficient funds ⁸	
HASHCOINS Team	info@hashcoins.com	N	1/27/19	HASHCOINS Team	
HASHCOINS Invoices	invoices@hashcoins.com	N	8/21/19	HASHCOINS Invoices	
IVAN TURYGIN	ivan@hashcoins.com	N	11/12/18	Co-founder of HASHFLARE and HASHCOINS	
Licenses HC	licenses@hashcoins.com	N	12/11/19	Believed to refer to hosting controller licenses	
Margarita Burunova	margarita.burunova @hashcoins.com	N	7/15/19	Data Center Chief Construction Engineer at Burfa Tech	
Nikolay Pavlovskiy	nikolay@hashcoins.com	Y	12/11/19	Chief Technology Officer of HASHCOINS, Vice President and Head of Business Development at HASHFLARE	
Pavel Tsihhotski	pavel@hashcoins.com	N	2/17/20	Support and Community Manager for HASHCOINS	

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Obtained from HASHFLARE's or HASHCOINS' website or through public reporting.

⁸ A number of investors on public chat forums suggested using chargebacks to recover funds lost through the termination of HASHFLARE cloud mining contracts.

Subscriber Name	Email Account	Admin	Last Login	Known Role ⁷	
SERGEI POTAPENKO	sergei@hashcoins.com	Y	2/10/20	Co-Founder and CEO of HASHFLARE and HASHCOINS	
Stanislav Pavlov	stanislav.pavlov@hashcoins.com	Y	2/19/20	Former Human Resources Manager and Customer Support for Burfa Tech OU	
Vadim Tsvetikov	vadim.tsvetikov@hashcoins.com	N	2/20/20	Data Center Operation Director at BURFA CAPITAL OU	
Vitali Pavlov	vitali@hashcoins.com	Y	2/18/20	Project Manager at HASHFLARE, Chief Product Officer at HASHCOINS	
	order to gather evidence of HAS		-	ns, including	

59. In order to gather evidence of HASHCOINS' operations, including discussions of mining cryptocurrency and providing returns to investors, the United States is seeking records from all remaining accounts associated with the HASHCOINS entity. Each account belongs to POTAPENKO, TURYGIN, or an employee that provides an important role for HASHCOINS, including data center operations, project management, and customer support. Other accounts are outward facing corporate accounts, including invoices@hashflare.com, admin@hashflare.com, or info@hashflare.com, that interact with customers, vendors, or suppliers, each of which are likely to contain evidence of additional victims and that HASHCOINS is operating as a Ponzi scheme.

B. Other Linked Entities

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1. BURFA Entities

60. After HASHFLARE terminated its mining contracts, HASHCOINS OU changed its legal name to Burfa Tech OU and HASHCOINS TRADE OU changed its name to Burfa Trade OU. As described below, a number of HASHCOIN and HASHFLARE employees then transferred and started working for these entities.

61. Burfa Tech OU and Burfa Trade OU, are part of a conglomerate formed by TURYGIN and POTAPENKO, under the umbrella company Burfa Capital OU, incorporated in Estonia (collectively called the "BURFA Entities"). These entities are described below:

Date Corporate Country Legal Form B									
7/12/13	Burfa Capital OU	Estonia	Limited POTAPENKO	Limited POTAPENKO		imited POTAPENKO		Limited POTAPENKO	Starfix UU
6/27/13	Burfa Media OU	Estonia	Private Limited Company	TURYGIN & POTAPENKO	N/A				
7/17/17	Burfa Real Estate OU	Estonia	Private Limited Company	Pavel Ivanov	Burfa Estate OU				
6/13/13	Burfa Tech OU	Estonia	Private Limited Company	TURYGIN & POTAPENKO	HASHCOINS OU, Euro Host UU				
11/26/14	Burfa Trade OU	Estonia	Private Limited Company	TURYGIN & POTAPENKO	HASHCOINS Trade OU, Habalink UU				
6/27/13	Burfa Invest OU	Estonia	Private Limited Company	TURYGIN & POTAPENKO	N/A				

- 62. According to the website for Burfa Capital, burfa.com, the various entities have the following missions:
- a. Burfa Capital OU "is a commercial organization . . . emphasizing collaboration and investment in such priority areas as IT, fintech and data processing."

 Burfa Capital OU appears to be the parent corporation in the BURFA Entities conglomerate.
- b. Burfa Media OU "provides computing equipment for processing large data arrays and for any operations that require significant computing power."
- c. Burfa Real Estate OU "is engaged in the construction of commercial and residential luxury real estate in Estonia . . . for the subsequent sale or rent."

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- d. Burfa Tech OU is reported to be "a leader in the field of data center design and maintenance for the industrial sector . . . specializ[ing] in high-performance computing and turnkey data center solutions." Like HASHCOINS, Burfa Tech OU is reported publicly to be "an IT company operating in Estonia mainly in the field of equipment for cryptocurrency mining."
 - e. Burfa Trade OU "is engaged in the wholesale trade of timber materials."
- f. Burfa Invest OU "is a globally recognized brand with three main vectors of development"—trade, real estate, and construction.
- 63. As described in the chart below, a number of the individuals employed by the BURFA Entities appear to have been formerly employed by HASHCOINS or HASHFLARE.

Name	Role in HASHCOINS or HASHFLARE	Role in BURFA Entities
SERGEI POTAPENKO	Co-Founder and CEO of HASHFLARE and HASHCOINS	Board Member & Co-Founder of Burfa Capital OU
IVAN TURYGIN	Co-founder of HASHFLARE and HASHCOINS	Board Member & Co-Founder of Burfa Capital OU
Nikolay Pavlovskiy	Chief Technology Officer of HASHCOINS, Vice President and Head of Business Development at HASHFLARE	Chief Technology Officer for Burfa Capital OU
Vitali Pavlov	Project Manager at HASHFLARE, Chief Product Officer at HASHCOINS	Chief Product Officer at Burfa Capital OU
Vadim Tsvetikov	Associated with HASHCOINS, as described above	Data Center Operation Director for Burfa Capital OU
Pavel Tsihhotski	Support and Community Manager for HASHCOINS	Head of Support for Burfa Capital OU
Stanislav Pavlov	Associated with HASHCOINS, as described above	Former Human Resources Manager and Customer Support for Burfa Tech OU
Tatjana Potapova	Chief Financial Officer for HASHCOINS	Chief Financial Officer for Burfa Media OU
Edger Bers	Public Relations Business Development Manager for HASHCOINS	Associated with BURFA Entities—possesses @burfa.com email address

64. Additionally, around the time the Bitcoin mining contracts were suspended, HASHFLARE transferred substantial assets to the BURFA Entities. For example, according

to bank records gathered during the course of this investigation, two different bank accounts held in the name of HASHFLARE transferred approximately \$15.5 million to a bank account held in the name of Burfa Media OU throughout the year in 2018.

- 65. According to information obtained from Google, the BURFA Entities use the email domain @burfa.com, which is hosted by Google. The billing address for this domain is Burfa Media OU, in the care of SERGEI POTAPENKO. Burfa Media OU is a G Suite client, a Google product that provides cloud computing, productivity, and collaboration tools for business clients.
- 66. The @burfa.com domain was established on August 22, 2017, listing two contact email addresses—admin@burfa.com and sergei@hashcoins.com (associated with POTAPENKO). As of December 2019, the Burfa entities used the Google services Google Calendar, Google Drive, Google Docs, Gmail, Google+, Google Hangouts, Groups for Business, Hangouts Chat, Jamboard Service, Keep, Sites, and Tasks.
- 67. As of December 2019, there were 42 email addresses associated with the domain @burfa.com. Those identified as most relevant to this investigation are included below:

Subscriber Name	Email Account	Admin	Last Login	Known Role	
Admin Burfa	admin@burfa.com	Y	5/15/19	Administrator	
Alerts Mining	alerts.mining@burfa.com	N	12/14/19	Mining Alerts	
Info Burfa	info@burfa.com	N	10/9/19	Public Facing Information Email Address	
Burfa Media	invoices@burfa.com	N	8/21/19	Invoices	
Edger Bers	edger.bers@burfa.com	N	12/3/19	Product Development for BURFA Tech OU	
IVAN TUROGIN	ivan@burfa.com	N	11/26/19	Board Member & Co- Founder of BURFA Capital OU	
Nikolay Pavlovskiy	nikolay.pavlovskiy@burfa.com	N	12/4/19	Chief Technology Officer for BURFA Capital OU	
Pavel Tsihhotski	pavel.tsilıhotski@burfa.com	N	12/4/19	Head of Support for BURFA Capital OU	

Subscriber Name	Email Account	Admin	Last Login	Known Role	
SERGEI POTAPENKO	sergei@burfa.com	N	12/3/19	Board Member & Co- Founder of BURFA Capital OU	
Stanislav Pavlov	stanislav.pavlov@burfa.com	Y	12/14/19	Former Human Resources Manager and Customer Support for Burfa Tech OU	
Tatjana Potapova	tatjana@burfa.com	N	12/8/19	Chief Financial Officer for Burfa Media OU	
Vadim Tsvetikov	vadim.tsvetikov@burfa.com	N	12/11/19	Data Center Operation Director for BURFA Capital OU	
Vitali Pavlov	vitali@burfa.com	N	12/8/19	Chief Product Officer at BURFA Capital OU	
68. In c	order to gather evidence of the	BURFA I	Entities' op		
ompanies to HA	SHFLARE and HASHCOINS	, includin	g discussio	ons of ongoing	
ryptocurrency m	nining, or the location of corpor	rate assets	s and evide	nce, the United States i	
eryptocurrency mining, or the location of corporate assets and evidence, the United States is eeking records from the above BURFA accounts associated with the former HASHFLARE					

68. In order to gather evidence of the BURFA Entities' operations as successor companies to HASHFLARE and HASHCOINS, including discussions of ongoing cryptocurrency mining, or the location of corporate assets and evidence, the United States is seeking records from the above BURFA accounts associated with the former HASHFLARE or HASHCOINS employees or current BURFA Tech OU employees, which is the successor corporation of HASHCOINS. The United States also seeks records from the BURFA Entities' outward facing corporate accounts, including invoices@burfa.com, admin@burfa.com, alerts.mining@burfa.com, or info@burfa.com, which interact with customers, vendors, or suppliers, each of which are likely to contain evidence that BURFA is the successor entity to HASHCOINS, and has subsumed its operations and assets.

C. Polybius Foundation

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- 69. In addition to HASHCOINS, HASHFLARE, and the BURFA Entities, TURYGIN and POTAPENKO have also formed a second conglomerate, comprised of four entities—Polybius Foundation OU, Polybius Tech OU, Polybius Ventures OU, and Polybius Fintech MidCo OU (collectively, referred to as "POLYBIUS").
 - 70. Each of these entities was incorporated in Estonia, as listed below:

Date	Corporate Name	Country	Legal Form	Directors or Beneficial Owners
2/13/17	Polybius Foundation OU	Estonia	Private Limited Company	TURYGIN, POTAPENKO & Anton Altement
2/1/18	Polybius Tech OU	Estonia	Private Limited Company	TURYGIN, POTAPENKO, Anton Altement & Vadim Gerassimov
2/8/18	Polybius Ventures OU	Estonia	Private Limited Company	TURYGIN, POTAPENKO & Anton Alternent
4/25/18	Polybius Fintech MidCo OU	Estonia	Private Limited Company	TURYGIN, POTAPENKO, Anton Altement & Mathieu Hardy

- 71. According to the website for POLYBIUS, Polybius.io, and public reporting, the various entities have the following missions:
- a. Polybius Tech OU created a cryptocurrency wallet called OSOM Finance, designed to hold both Bitcoin and alternative coins.
- b. Polybius Ventures OU and Polybius Fintech MidCo OU are not separately described but are both subsidiaries in the POLYBIUS ecosystem.
- c. Polybius Foundation, according to its Prospectus (also known as a "Whitepaper"), is "a team of financial, security, legal and technical experts" who are raising funds to start Polybius Bank. The intent was for Polybius Bank to be a "fully digital bank accessible everywhere at any time. It will have all the functions of a classical bank, but will not host any branches, nor any physical front-offices and will rely fully on the latest digital technologies." The front of the prospectus reads, in part: "Polybius POWERED BY HASHCOINS."
- 72. According to an article written by Forbes on October 29, 2018, POLYBIUS raised approximately \$32 million dollars during its Initial Coin Offering ("ICO") in the summer of 2017. The symbol for the POLYBIUS coins is PLBT. As of the date of the writing of the article, no tangible product had been launched. In fact, it announced that it abandoned the prospect of opening a bank, and that it would develop a mobile app instead.
- 73. A cursory review of the POLYBIUS tokens was discussed in a law review article published by the Columbia Law Review in April of 2019, entitled "Coin-Operated Capitalism." In the article, the authors note that a "development team can unilaterally change the [POLYBIUS] tokens purchased by investors—or sometimes, propose changes that

will not be adopted if a certain percentage of users do not object." The authors opine that the latter type of proposed changes that may be detrimental to investors may automatically take effect with no knowledge of the investor because (1) the default vote is inherently set to "yes," and (2) the investing public as a whole does not have the technical skills to monitor or understand the proposed changes a development team may make to the POLYBIUS tokens. To date, it is unknown whether any such changes occurred.

- 74. On November 17, 2018, POLYBIUS released a blog post announcing it was releasing a new personal finance management service called "OSOM." Later in 2019, POLYBIUS released instructions about how to transfer PLBT tokens from an investor's POLYBIUS Wallet to their OSOM Wallet. According to POLYBIUS, transfer of the PLBT tokens to the OSOM Wallet was important because the POLYBIUS Wallet would eventually no longer be functioning.
- 75. A simple search of Apple's "App Store" and Google's "Play Store" for "POLYBIUS" and "OSOM" yields no relevant results.
- 76. The POLYBIUS coin is still available for purchase as of today, and both the OSOM website and POLYBIUS website are making assertions that a product is being developed.
- 77. According to banking records, POLYBIUS has received substantial payments from the BURFA Entities. For example, in June 2018, Burfa Media OU transferred more than € 2 million to accounts held by Polybius Foundation OU.
- 78. As with the BURFA Entities, some of the individuals employed by POLYBIUS appear to have been formerly employed by HASHCOINS or HASHFLARE or the BURFA entities. As a result, it appears that POLYBIUS is a successor entity of HASHCOINS and HASHFLARE.

Name	Role in HASHCOINS, HASHFLARE or BURFA	Role in POLYBIUS
SERGEI POTAPENKO	Co-Founder and CEO of HASHFLARE and HASHCOINS	Co-Founder of POLYBIUS
IVAN TURYGIN	Co-founder of HASHFLARE and HASHCOINS	Co-Founder of POLYBIUS

Name	Role in HASHCOINS, HASHFLARE or BURFA	Role in POLYBIUS
Edgar Bers	Public Relations Business Development Manager for HASHCOINS	Communications and Media Manager for POLYBIUS
Pavel Tsihhotski	Support and Community Manager for HASHCOINS	Associated with POLYBIUS (possesses @polybius.io email address)
Anton Altement	Associated with BURFA Entities (possesses @burfa.com email address)	CEO & Co-Founder of POLYBIUS
Vitali Pavlov	Project Manager at HASHFLARE, Chief Product Officer at HASHCOINS	Product Manager POLYBIUS

- 79. According to information obtained from Google, POLYBIUS uses the email domain @polybius.io, which is hosted by Google. Based on publicly available domain name searches, it appears that POLYBIUS is a G Suite client, a Google product that provides cloud computing, productivity, and collaboration tools for business clients.
- 80. During the course of this investigation, law enforcement has identified at least seven email addresses associated with the domain @polybius.io. Those identified as most relevant to this investigation are included below:

Suspected Owner	Email Account	Known Role
POLYBIUS Support	support@polybius.io	Support
POLYBIUS Information	info@polybius.io	Information
Anton Altement	anton.altement@polybius.io	CEO & Co-Founder of POLYBIUS
Edger Bers	edgar.bers@polybius.io	Communications and Media Manager for POLYBIUS
IVAN TURYGIN	ivan.turygin@polybius.io	Co-Founder of POLYBIUS
SERGEI POTAPENKO	sergei.potapenko@polybius.io	Co-Founder of POLYBIUS
Pavel Tsihhotski	pavel.tsihhotski@polybius.io	Unknown
Vitali Pavlov	vitali.pavlov@polybius.io	Product Manager POLYBIUS

81. In order to gather evidence of POLYBIUS's operations as a successor company to HASHFLARE and HASHCOINS, including discussions of ongoing cryptocurrency management, or the location of corporate assets and evidence, the United

States is seeking records from the above POLYBIUS accounts associated with the former HASHFLARE or HASHCOINS employees or current POLYBIUS executives, which continues to operate in the cryptocurrency sphere. The United States also seeks records from POLYBIUS's outward facing corporate accounts, including support@polybius.io and info@polybius.io, which interact with customers and the public, each of which are likely to contain evidence that POLYBIUS is the successor entity to HASHCOINS, and has subsumed its operations and assets.

D. Dalmeron Projects & Ecohouse Networks

- 82. During the course of this investigation, law enforcement has learned that an account held by HASHFLARE transferred over € 40 million to an account held by Dalmeron Projects LP in Latvia. Dalmeron Projects LP transferred a significant portion of those funds to accounts held by Burfa Media OU, Polybius Foundation OU, and HASHCOINS.
- 83. Similarly, law enforcement has learned that HASHCOINS has transferred over € 900,000 to accounts held by Ecohouse Networks LP in Latvia. Ecohouse Networks transferred a portion of those funds to an account held by Burfa Media OU in Estonia.
- 84. Dalmeron Projects LP was incorporated in Canada, as described below. Ecohouse Networks was incorporated in the United Kingdom. Dalmeron Projects LP appears to operate the website www.dalmeron.com, advertising "cryptocurrency cloud mining solutions for corporate clients." The website explained "we offer hashing power to companies working with cryptocurrencies, hashing algorithms or private blockchain-based networks using the newest ASIC hardware and GPU rigs."

Date	Corporate Name	Country	Legal Form	Directors or Beneficial Owners
3/8/16	Dalmeron Projects LP	Canada	Limited Partnership	Unknown
11/17/14	Ecohouse Networks	UK	Limited Partnership	No persons with Significant Control Listed

85. As described below, despite their separate corporate forms, both entities appear to be linked to IVAN TURYGIN.

- 86. According to information obtained from Google, the account dalmeronprojects@gmail.com was created on October 24, 2016, listing the subscriber name as "Dalmeron Projects." The recovery email listed on the account was ecohousenetworks@gmail.com. The services associated with the account were: Web & App Activity, Gmail, Google Hangouts, YouTube, Google Calendar, Android Partner, and Google My Maps.
- 87. The dalmeronprojects@gmail.com account is linked by cookies to the ecohousenetworks@gmail.com, ivan.turygin@polybius.com, ivan@burfa.com, and turygin@gmail.com email addresses. A cookie is a text file that a web browser places on a user's computer or machine. Cookies are used for a variety of purposes, including authentication, security, storing website information and preferences, advertising, and analytics. Based on my training and experience, I know if accounts are linked by cookies it suggests that they were accessed and owned by a common user.
- 88. According to information obtained from Google, the account ecohousenetworks@gmail.com was created on March 9, 2015, listing the subscriber name as "Ecohouse Networks." The recover email listed on the account was turygin@gmail.com, which as explained below is associated with TURYGIN. The services associated with the account were: Web & App Activity, Gmail, Google Hangouts, YouTube, Google Calendar, Android Partner, and Google My Maps.
- 89. The ecohousenetworks@gmail.com account is also linked by cookies to the dalmcronprojects@gmail.com, ivan.turygin@polybius.io, ivan@burfa.com, and turygin@gmail.com accounts.
- 90. In order to determine the business purpose of these transfers, or to gather evidence that these transfers were a continuation of the HASHFLARE Ponzi operation or a money laundering transaction, designed to conceal assets stolen from HASHFLARE and HASHCOINS investors, the United States seeks records for both accounts belonging to Ecohouse Networks LP and Dalmeron Projects LP.

E. Personal Email Addresses

1 ||

- 91. In addition to corporate email addresses, TURYGIN and POTAPENKO both use personal email addresses hosted at Google.
- 92. On May 10, 2006, the email address sergei.potapenko@gmail.com was registered, listing the subscriber name as "Sergei Pt." The recovery email associated with the account was sergei@hashcoins.com. The services associated with the account include: Account Activity, Android, Contacts, Gmail, Google Calendar, Google Chrome Sync, Google Docs, Google Drive, Google Hangouts, Google Keep, Google Maps Engine, Google Mobile, Google My Maps, Google Payments, Google Photos, Google Play, Google Search Console, Google+, Location History, YouTube and iGoogle.
- 93. According to Google, the sergei.potapenko@gmail.com account is linked by cookies to sergei@burfa.com and sergei@hashcoins.com.
- 94. On February 25, 2005, the email address turygin@gmail.com was registered, listing the subscriber name as IVAN TURYGIN. The recovery email associated with the account was ivan@burfa.com. The services associated with the account include: Android, Google Calendar, Google Chrome Sync, Google Docs, Google Drive, Google Hangouts, Google Maps, Google Maps Engine, Google My Maps, Google Photos, Google Voice, Location History, Web & App Activity, YouTube, and iGoogle.
- 95. According to Google, the turygin@gmail.com account is linked by cookies to dalmeronprojects@gmail.com, ecohousenetworks@gmail.com, ivan.turygin@polybius.io, and ivan@burfa.com.
- 96. As described below, although these email addresses end with the domain @gmail.com, both POTAPENKO and TURYGIN used them to communicate regarding corporate matters tied to HASHFLARE, HASHCOINS, the BURFA Entities, and POLYBIUS.

F. Emails Sent and Received

97. POTAPENKO and TURYGIN use their @hashcoins.com, @burfa.com, @polybius.io, and @gmail.com email addresses virtually interchangeably to communicate

with other employees of their corporations. For example, POTAPENKO and TURYGIN have used the following accounts to communicate with the following employees:

3	POTAPENKO and TURYGIN Accounts	Entity	Communicating With ⁹
4	sergei@hashcoins.com	HASHCOINS	vitali@hashcoins.com
5			accounts@hashcoins.com
6			job@hashcoins.com
١,			pavel@hashcoins.com
7			vadim.tsetikov@hashcoins.com invoices@hashcoins.com
8			irina.rusakova@hashcoins.com
- II			ivan@hashcoins.com
9			simon.inkin@hashcoins.com
0			alexandr@hashcoins.com
- II			pavel.borozdin@hashcoins.com
1			mihkel@hashcoins.com
2			hctinvoices@hashcoins.com
l II			arkadi.zaitzev@hashcoins.com
3			dan.but@hashcoins.com admin@hashcoins.com
4			management@hashcoins.com
- II			info@hashcoins.com
5			stanilov.pavlov@hashcoins.com
6			margarita.burunova@hashcoins.com
			job+managers@hashcoins.com
17			anna.vesselko@hashcoins.com
8			maksim.stadnik@hashcoins.com
9			simon@hashcoins.com
9			cfbot@hashcoins.com
20			nikolay.pavlovskiy@hashcoins.com jira@hashcoins.com
$_{1}\ $			konstantin.kalakauskas@hashcoins.com
- II			roman.kononov@hashcoins.com
22			sales@hashcoins.com
$\ 23\ $			roman.sadovski@hashcoins.com
- II			cb@hashcoins.com
24			ervin.bazin@hashcoins.com
25			renna@hashcoins.com
- II			support@hashcoins.com adim.tsvetikov@hashcoins.com
26			aleksandr@hashcoins.com
27			allan.rumjantsev@hashcoins.com

⁹ As a to, from, or co-cc'd address.

	APENKO and TURYGIN Accounts	Entity	Communicating With9
2	Accounts		allan.vaino@hashcoins.com
3			andrei@hashcoins.com
4			anton@hashcoins.com
III			artur.kutsenko@hashcoins.com christine@hashcoins.com
5			it+noreply@hashcoins.com
5			julia.dolzenkova@hashcoins.com
,			julia.odnodvortseva@hashcoins.com
III			kirill.tserjukanov@hashcoins.com lev.malinovski@hashcoins.com
3			lev.mozhaev@hashcoins.com
·			licenses@hashcoins.com
)			matt.morozov@hashcoins.com natalia.levinzon@hashcoins.com
.			nikolai@hashcoins.com
III			roman@hashcoins.com
-			tatjana@hashcoins.com
			valentin@hashcoins.com vitaly@hashcoins.com
.			wordpress@hashcoins.com
		BURFA Entities	ivan@burfa.com
III			tatjana@burfa.com
5			pavel@burfa.com anton.altement@burfa.com
'			julia.karpa@burfa.com
:			margarita.burunova@burfa.com
,			karmella@burfa.com vitali@burfa.com
III			info@burfa.com
·			vadim.tsvetikov@burfa.com
			sergei@burfa.com
.			anton@burfa.com admin@burfa.com
III			anton.fjodorov@burfa.com
			invoices@burfa.com
·			irina.rusakova@burfa.com ivan.turygin@burfa.com
		POLYBIUS	anton.altement@polybius.io
			edgar.bers@polybius.io
III			mathieu.hardy@polybius.io
			ivan.turygin@polybius.io sergei.potapenko@polybius.io
:			support@polybius.io

POTAPENKO and TURYGIN	Entity	Communicating With9
Accounts		jerome.dickinson@polybius.io
		info@polybius.io
		vadim.gerassimov@polybius.io gunther.debacker@polybius.io
		pavel.tsihhotski@polybius.io andrius.verseckas@polybius.io
		dmitri.troskov@polybius.io igor.rusovitch@polybius.io
		dilnoza.shaumarova@polybius.io etienne.goffin@polybius.io
		mykhailo.riabokon@polybius.io
= 1	DALMERON PROJECTS	dalmeronprojects@gmail.com
- []	TURYGIN	turygin@gmail.com
	HASHFLARE	alex@hashflare.io info@hashflare.io
		support@hashflare.io
		legal@hashflare.io alerts@hashflare.io
ivan@hashcoins.com	HASHCOINS	job@hashcoins.com
		vitali@hashcoins.com sergei@hashcoins.com
		vadim.tsvetikov@hashcoins.com
		nikolay@hashcoins.com
		margarita.burunova@hashcoins.com management@hashcoins.com
		job+managers@hashcoins.com
		stanislav.pavlov@hashcoins.com
		arkadi.zaitsev@hashcoins.com cfbot@hashcoins.com
		simon.inkin@hashcoins.com
		pavel.borozdin@hashcoins.com edgar@hashcoins.com
		pavel@hashcoins.com
		info@hashcoins.com
		alexandr@hashcoins.com irina.rusakova@hashcoins.com
		renna@hashcoins.com
		sales@hashcoins.com
		support@hashcoins.com aleksandr@hashcoins.com
		andrei@hashcoins.com
		anton@hashcoins.com

1	POTAPENKO and TURYGIN Accounts	Entity	Communicating With9
2			invoices@hashcoins.com
3			it+noreply@hashcoins.com
4			iv.an@hashcoins.com
5			konstantin.kalakauskas@hashcoins.com nikolay.pavlovskiy@hashcoins.com roman@hashcoins.com
6			tatjana@hashcoins.com
7			valentin@hashcoins.com vitaly@hashcoins.com
8		BURFA Entities	tatjana@burfa.com
9			vadim.tsvetikov@burfa.com anton.altement@burfa.com ivan@burfa.com
10			julia.karpa@burfa.com
11			margarita.burunova@burfa.com
12	- 10	POLYBIUS	sergei@burfa.com support@polybius.io
13	9.1	TOLIBIOS	anton.altement@polybius.io
			info@polybius.io
14			edgar.bers@polybius.io
15		HASHFLARE	legal@hashflare.io
	sergei.potapenko@gmail.com	HASHCOINS	dev@hashcoins.com
16			edgar@hashcoins.com info@hashcoins.com
17			invoices@hashcoins.com
18			mihkel@hashcoins.com
l II			nikolay@hashcoins.com
19			partners@hashcoins.com
20			pavel.borozdin@hashcoins.com pavel@hashcoins.com
$_{21}$			sales@hashcoins.com
			sergei@hashcoins.com
22			simon.inkin@hashcoins.com
23			stanislav.pavlov@hashcoins.com support@hashcoins.com
24	7.11		vadim@hashcoins.com vitali@hashcoins.com
25		BURFA Entities	ivan@burfa.com
26			pavel@burfa.com
			info@burfa.com
27		[1]	tatjana@burfa.com karmella@burfa.com
28			margarita.burunova@burfa.com

POTAPENKO and TURYGIN	Entity	Communicating With ⁹
Accounts		nikolay.pavlovskiy@burfa.com sergei@burfa.com vitali@burfa.com
	POLYBIUS	support@polybius.io anton.altement@polybius.io info@polybius.io
	HASHFLARE	info@hashflare.io alex@hashflare.io alerts@hashflare.io support@hashflare.io invoices@hashflare.io
turygin@gmail.com	HASHCOINS	invoices@hashcoins.com simon.inkin@hashcoins.com edgar@hashcoins.com info@hashcoins.com cloud@hashcoins.com ivan@hashcoins.com pavel.borozdin@hashcoins.com
	BURFA	irina.rusakova@burfa.com
	Entities	vitali@burfa.com
	POLYBIUS	anton.altement@polybius.io
	HASHFLARE	info@hashflare.io
sergei@burfa.com	HASHCOINS	support@hashflare.io vitali@hashcoins.com invoices@hashcoins.com irina.rusakova@hashcoins.com alexandr@hashcoins.com nikolay@hashcoins.com arkadi.zaitsev@hashcoins.com pavel@hashcoins.com vadim.tsvetikov@hashcoins.com info@hashcoins.com pavel.borozdin@hashcoins.com info@hashcoins.com ivan.turygin@hashcoins.com sergei.potapenko@hashcoins.com sergei@hashcoins.com margarita.burunova@hashcoins.com ivan@hashcoins.com nikolay.payloyskiy@hashcoins.com
	BURFA Entities	nikolay.pavlovskiy@hashcoins.com ivan@burfa.com
		anton.altement@burfa.com vitali@burfa.com

1	POTAPENKO and TURYGIN Accounts	Entity	Communicating With9
2	Accounts		nikolay@burfa.com
3			tatjana@burfa.com
$_{4}$			sergei.potapenko@burfa.com
			pavel@burfa.com irina.rusakova@burfa.com
5			alexandr.gromov@burfa.com
6			anton@burfa.com
7			ivan.turygin@burfa.com kiikri@burfa.com
8			karmella@burfa.com
Ш			julia.karpa@burfa.com
9			margarita.burunova@burfa.com
0			andrei.koshmanov@burfa.com vadim.tsvetikov@burfa.com
$_{1}\Vert$			nikolay.pavlovskiy@burfa.com
$_{2}\Vert$			pavel.tsihhotski@burfa.com
Ш			accounts@burfa.com anna.vesselko@burfa.com
3			info@burfa.com
4			dan.but@burfa.com
5			stanislav.pavlov@burfa.com anton.fjodorov@burfa.com
6			ekaterina.gatovskaia@burfa.com
			invoices@burfa.com
7			iturygin@burfa.com ivan.turogin@burfa.com
$8 \parallel$			npavlovskiy@burfa.com
9	_ = 1	F	spotapenko@burfa.com
0	(1)	POLYBIUS	mathieu.hardy@polybius.io
Ш			jerome.dickinson@polybius.io vadim.gerassimov@polybius.io
1			edgar.bers@polybius.io
2	1 10	HILGHEL LDG	maksim.stadnik@polybius.io
3		HASHFLARE	info@hashflare.io ivan.turygin@hashflare.io
4∥			sergei.potapenko@hashflare.io
Ш			support@hashflare.io
5			legal@hashflare.io
6	ivan@burfa.com	HASHCOINS	nikolay.pavlovskiy@hashflare.io sergei@hashcoins.com
7		300 300 20 000 100	vitali@hashcoins.com
$_{8}\ $			nikolay@hashcoins.com vadim.tsvetikov@hashcoins.com

1	POTAPENKO and TURYGIN	Entity	Communicating With9
2	Accounts		irina.rusakova@hashcoins.com
3			edgar@hashcoins.com
$_{4}$			alexandr@hashcoins.com
5			margarita.burunova@hashcoins.com info@hashcoins.com
6			invoices@hashcoins.com pavel.borozdin@hashcoins.com
7			sergei.potapenko@hashcoins.com arkadi.zaitsev@hashcoins.com
8			ivan.turygin@hashcoins.com
			pavel@hashcoins.com
9			vadim@hashcoins.com
10			vitali.pavlov@hashcoins.com
			nikolay.pavlovskiy@hashcoins.com
11			konstantin.kalakauskas@hashcoins.com anna.vesselko@hashcoins.com
12			ivan@hashcoins.com
13			simon.inkin@hashcoins.com
13			stanislav.pavlov@hashcoins.com
14			lev.mozhaev@hashcoins.com
15			nikolai@hashcoins.com
			adim.tsvetikov@hashcoins.com
16			allan.rumjantsev@hashcoins.com allan.vaino@hashcoins.com
$_{17} $			artur.kutsenko@hashcoins.com
			cfbot@hashcoins.com
18			christine@hashcoins.com
19			dan.but@hashcoins.com
<u>,</u>			ervin.bazin@hashcoins.com
20			julia.dolzenkova@hashcoins.com
21			julia.odnodvortseva@hashcoins.com
$_{22}$			kirill.tserjukanov@hashcoins.com lev.malinovski@hashcoins.com
			maksim.stadnik@hashcoins.com
23			mihkel@hashcoins.com
$_{24} $			natalia.levinzon@hashcoins.com
			roman.sadovski@hashcoins.com
25			sales@hashcoins.com
26		BURFA Entities	tatjana@burfa.com sergei@burfa.com
27			pavel@burfa.com
28			anton.altement@burfa.com kiikri@burfa.com

PC	OTAPENKO and TURYGIN	Entity	Communicating With9
2	Accounts		in the second second
			julia.karpa@burfa.com karmella@burfa.com vitali@burfa.com
			margarita.burunova@burfa.com
		- 17	info@burfa.com
			irina.rusakova@burfa.com nikolay@burfa.com
			ivan.turygin@burfa.com anton@burfa.com
			nikolay.pavlovskiy@burfa.com
			alexandr.gromov@burfa.com vadim.tsvetikov@burfa.com
			sergei.potapenko@burfa.com invoices@burfa.com
			andrei.koshmanov@burfa.com
			iturygin@burfa.com npavlovskiy@burfa.com
			spotapenko@burfa.com
			anna.vesselko@burfa.com
			anton.fjodorov@burfa.com
			pavel.tsihhotski@burfa.com kiikri+managers@burfa.com
			press@burfa.com tatjana.potapova@burfa.com
			tech@burfa.com
			vitali.pavlov@burfa.com
		POLYBIUS	anton.altement@polybius.io support@polybius.io
			edgar.bers@polybius.io mathieu.hardy@polybius.io
			sergei.potapenko@polybius.io info@polybius.io
			jerome.dickinson@polybius.io
			vadim.gerassimov@polybius.io
			andrius.verseckas@polybius.io dmitri.troskov@polybius.io
			emc@polybius.io
			igor.rusovitch@polybius.io pavel.tsihhotski@polybius.io
			etienne.goffin@polybius.io
			ivan.turygin@polybius.io
			vitali.pavlov@polybius.io

POTAPENKO and TURYGIN Accounts	Entity	Communicating With9
	DALMERON PROJECTS	dalmeronprojects@gmail.com
	POTAPENKO	sergei.potapenko@gmail.com
dalmeronprojects@gmail.com	HASHCOINS	sergei@hashcoins.com
, , , , , , , , , , , , , , , , , , , ,	BURFA Entities	ivan@burfa.com sergei@burfa.com
	POLYBIUS	support@polybius.io info@polybius.io
ecohousenetworks@gmail.com	HASHCOINS	info@hashcoins.com
	BURFA Entities	ivan@burfa.com info@burfa.com
	POLYBIUS	support@polybius.io info@polybius.io
	HASHFLARE	info@hashflare.io

98. POTAPENKO and TURYGIN also used their various accounts to communicate with cryptocurrency providers or mining companies, as indicated below:

POTAPENKO and TURYGIN Accounts	Communicating With
sergei@hashcoins.com	marc.taverner@bitfury.com anna@bitmain.com info@bitmaintech.com sharif.allayarov@bitmaintech.com kirill@inno3d.com alexey.s@cryptopay.me dmitry@cryptopay.me nikolai@cryptopay.me nickolay.s@cryptopay.me info@cryptopay.me pavel@cryptopay.me pavel@cryptopay.me
ivan@hashcoins.com	evgeniy.pavlov@bitfury.com marc.taverner@bitfury.com mk@bitfury.com claus.pedersen@bitfury.com aymen.elalfy@bitfury.com daan.mcgrath@bitfury.com bing.feng@bitfury.com auke.russchen@bitfury.com georgy.zabadaev@bitfury.com

POTAPENKO and TURYGIN Accounts	Communicating With
	sales@bitfury.com rodrigo.marques@bitfury.com george@cryptopay.me
sergei.potapenko@gmail.com	marc.taverner@bitfury.com george@cryptopay.me support@cryptopay.me
sergei@burfa.com	nikolai@cryptopay.me support@cryptopay.me
ivan@burfa.com	georgy.zabadaev@bitfury.com kirill@inno3d.com support@cryptopay.me eric@cryptopay.me george@cryptopay.me help@cryptopay.me

99. Finally, POTAPENKO and TURYGIN used sergei@hashcoins.com, sergei.potapenko@gmail.com, turygin@gmail.com, sergei@burfa.com, ivan@burfa.com, and dalmeronprojects@gmail.com to communicate with financial representatives where HASHFLARE, HASHCOINS, and other entities held accounts. And POTAPENKO and TURYGIN used sergei@hashcoins.com, sergei.potapenko@gmail.com, turygin@gmail.com, and sergei@burfa.com to communicate with representatives of CloudFlare and/or Microsoft, where HASHFLARE and the BURFA Entities host their websites.

100. Based on the above, there is probable cause to believe that information contained in the SUBJECT ACCOUNTS could reveal, among other things: (1) the plans and strategies formed by the users of the SUBJECT ACCOUNTS to defraud investors and customers, (2) the actions taken to execute those plans, (3) the operations and relationship between the various entities, including assets transferred between those entities; (4) the extent and capacity of mining operations at HASHCOINS and HASHFLARE; (5) the location of assets paid by investors to HASHCOINS and HASHFLARE; and (6) information on where HASHFLARE and HASHCOINS store their server data, including data on the identity and investment of each HASHFLARE subscriber. Therefore, the United States seeks records and information from Google related to each of the SUBJECT ACCOUNTS.

BACKGROUND CONCERNING ONLINE ACCOUNTS

- 101. As explained herein, information stored in connection with an online account may provide crucial evidence of the "who, what, why, when, where, and how" of the criminal conduct under investigation, thus enabling the United States to establish and prove each element or alternatively, to exclude the innocent from further suspicion.
- 102. In my training and experience, the information stored in connection with an online account can indicate who has used or controlled the account. This "user attribution" evidence is analogous to the search for "indicia of occupancy" while executing a search warrant at a residence. For example, email communications, contacts lists, and images sent (and the data associated with the foregoing, such as date and time) may indicate who used or controlled the account at a relevant time.
- 103. Further, information maintained by the email provider can show how and when the account was accessed or used. For example, as described below, email providers typically log the Internet Protocol (IP) addresses from which users access the email account, along with the time and date of that access. By determining the physical location associated with the logged IP addresses, investigators can understand the chronological and geographic context of the email account access and use relating to the crime under investigation. This geographic and timeline information may tend to either inculpate or exculpate the account owner. Additionally, information stored at the user's account may further indicate the geographic location of the account user at a particular time (e.g., location information integrated into an image or video sent via email).
- 104. Stored electronic data may provide relevant insight into the email account owner's state of mind as it relates to the offense under investigation. For example, information in the email account may indicate the owner's motive and intent to commit a crime (e.g., communications relating to the crime), or consciousness of guilt (e.g., deleting communications in an effort to conceal them from law enforcement).

1 |

1. Google's Services

105. In my training and experience, I have learned that Google provides a variety of online services, including electronic mail ("email") access and instant messaging (otherwise known as "chat" messaging), to the general public. Google provides subscribers email and chat accounts at the domain name "@gmail.com." Google also allows subscribers to register a custom domain name and set up Google services such as chat and email using that domain name instead of "@gmail.com."

A. Subscriber Records and Account Content

- 106. Subscribers obtain an account by registering with Google. When doing so, email providers like Google ask the subscriber to provide certain personal identifying information. This information can include the subscriber's full name, physical address, telephone numbers and other identifiers, alternative email addresses, and, for paying subscribers, means and source of payment (including any credit or bank account number). In my training and experience, such information may constitute evidence of the crimes under investigation because the information can be used to identify the account's user or users, and to help establish who has dominion and control over the account.
- 107. Email providers typically retain certain transactional information about the creation and use of each account on their systems. This information can include the date on which the account was created, the length of service, records of log-in (*i.e.*, session) times and durations, the types of service utilized, the status of the account (including whether the account is inactive or closed), the methods used to connect to the account (such as logging into the account via Google's websites), and other log files that reflect usage of the account. In addition, email providers often have records of the IP address used to register the account and the IP addresses associated with particular logins to the account. Because every device that connects to the Internet must use an IP address, IP address information can help to identify which computers or other devices were used to access the email account.
- 108. In some cases, email account users will communicate directly with an email service provider about issues relating to the account, such as technical problems, billing

inquiries, or complaints from other users. Email providers typically retain records about such communications, including records of contacts between the user and the provider's support services, as well records of any actions taken by the provider or user as a result of the communications. In my training and experience, such information may constitute evidence of the crimes under investigation because the information can be used to identify the account's user or users.

- 109. In general, an email that is sent to a Google subscriber is stored in the subscriber's "mail box" on Google's servers until the subscriber deletes the email. When the subscriber sends an email, it is initiated at the user's computer, transferred via the Internet to Google servers, and then transmitted to its end destination. Google often maintains a copy of received and sent emails. Unless the sender specifically deletes an email from the Google server, the email can remain on the system indefinitely. Even if the subscriber deletes the email, it may continue to be available on Google's servers for some period of time.
- 110. A sent or received email typically includes the content of the message, source and destination addresses, the date and time at which the email was sent, and the size and length of the email. If an email user writes a draft message but does not send it, that message may also be saved by Google but may not include all of these categories of data.
- 111. In addition to email and chat, Google offers subscribers numerous other services including: Android, Blogger, Google Alerts, Google Calendar, Google Chrome Sync, Google Cloud Print, G-Suite, Google Developers Console, Google Drive, Google Hangouts, Google Maps, Google Payments, Google Photos, Google Scarch Console, Google Voice, Google+, Google Profile, Location History, Web & Activity, Search, and YouTube, among others. Thus, a subscriber to a Google account can also store files, including address books, contact lists, calendar data, photographs and other files, on servers maintained and/or owned by Google. For example, Google Calendar is a calendar service that users may utilize to organize their schedule and share events with others. Google Drive may be used to store data and documents, including spreadsheets, written documents (such as Word or Word Perfect) and other documents. Google Photos can be used to create photo albums, store

photographs, and share photographs with others and "You Tube," allows users to view, store and share videos. Google Search Console records a Google account user's search queries. And Google Web & Activity records certain browsing history depending on whether the account holder is logged into their account. Google Keep is a note-taking service, offering a variety of tools for taking notes, including text, lists, images, and audio. Google Hangouts enables users to communicate with each other using instant messaging (including text, video, and voice), including through an application or within a Gmail browser window. Instant messages sent and received using these services are often saved within a user's account and accessible through Gmail. Google Voice offers a VOIP telephone number and records and transcribes voicemails. Groups for Business allow companies to create group discussions through emails, which are archived by Google. Like many internet service companies (including the companies discussed below), the services Google offers are constantly changing and evolving.

112. Based upon my training and experience, all of these types of information may be evidence of crimes under investigation. Stored communications, documents, and Google account activity not only may contain evidence of the crimes, but also help identify the participants in those crimes. For example, address books and contact lists may help identify both the owner of the account and locate co-conspirators. Similarly, photographs and videos stored in the account may help identify the account owner's true identity or document evidence of the crimes under investigation, including pictures of cryptocurrency mining equipment or screenshots of corporate websites. Documents (such as Google Docs used to store investor information or mining efforts), may identify the scope of the criminal activity, including containing important business documents, profits and loss statements, or communications with investors. And calendar data may reveal the timing and extent of criminal activity, including the timing of establishing corporate entities or the termination of bitcoin mining contracts. Search and browsing history may also constitute direct evidence of the crimes under investigation to the extent the browsing history or search history might

include searches and browsing history related to bitcoin mining, purchasing cryptocurrency, or identifying the victims.

113. Google is also able to provide information that will assist law enforcement in identifying other accounts associated with the SUBJECT ACCOUNTS, namely, information identifying and relating to other accounts used by the same subscriber. This information includes any forwarding or fetching accounts¹⁰ relating to the SUBJECT ACCOUNTS because they were accessed from the same computer (referred to as "cookie overlap"), all other Google accounts that list the same SMS phone number as the SUBJECT ACCOUNTS, all other Google accounts that list the same recovery email addresses¹¹ as do the SUBJECT ACCOUNTS, and all other Google accounts that share the same creation IP address as the SUBJECT ACCOUNTS. Information associated with these associated accounts will assist law enforcement in determining who controls the SUBJECT ACCOUNTS and will also help to identify other email accounts relevant to the investigation.

B. Google Location History and Location Reporting

114. According to Google's website, "Location Reporting" allows Google to periodically store and use a device's most recent location data in connection with the Google Account connected to the device. "Location History" allows Google to store a history of location data from all devices where a user is logged into their Google Account and have enabled Location Reporting. According to Google "[w]hen you turn on Location Reporting for a device like your iPhone or iPad, it lets Google periodically store and use that device's most recent location data in connection with your Google Account." How often Location Reporting updates location data is not fixed. Frequency is determined by factors such as

²⁵ A forwarding or fetching account related to one of the **SUBJECT ACCOUNTS** would be a separate e-mail account that can be setup by the user to receive copies of all of the e-mail sent to the Target Account.

The recovery e-mail address is an additional e-mail address supplied by the user that is used by Google to confirm your username after you create an e-mail account, help you if you are having trouble signing into your Google account or have forgotten your password, or alert you to any unusual activity involving user's Google e-mail address.

how much battery life the device has, if the device is moving, or how fast the device is moving. Google's location services may use GPS, Wi-Fi hotspots, and cellular network towers to determine an account holder's location.

- 115. Based on the above, I know that if a user of the SUBJECT ACCOUNTS utilizes a mobile device to access the respective account identified in Attachment A-1 and has not disabled location services on his or her device/s or through the Google account settings, Google may have detailed records of the locations at which the account holder(s) utilized the mobile device(s). This type of evidence may further assist in identifying the account holder(s), and lead to the discovery of other evidence of the crimes under investigation. For example, in the present case, HASHFLARE and HASHCOINS own several bank accounts held overseas. Location data could identify countries where additional accounts were opened or accessed.
- 116. I know that Google's Android service collects and stores identifying information about an Android smart phone used to access the Google account, including the International Mobile Equipment Identifier (IMEI), International Mobile Subscriber Identity (IMSI), telephone number and mobile carrier code. In addition, Google may collect and store certain data related to applications used on Android smart phones, and in certain instances, Google may allow a user to backup settings, app data, communications, and other data stored on an Android device. I know that Google's Location History service periodically queries the physical location of a device that is currently accessing a Google account through the device's GPS, nearby Wi-Fi network IDs and cellular tower information and records a history of device movements in Google's servers. Because of the complicated nature of the successive corporate structures, the overlapping employees at each entity, and the existence of foreign bank accounts, I believe the founders of HASHCOINS, HASHFLARE, the BURFA Entities, and POLYBIUS have made a concerted effort to disguise their assets and corporate structures, I am requesting Google to provide information from the Android service and Location History service from the SUBJECT ACCOUNTS.

INFORMATION TO BE SEARCHED AND THINGS TO BE SEIZED

- 117. Pursuant to Title 18, United States Code, Section 2703(g), this application and affidavit for a search warrant seeks authorization to require Google, and their agents and employees, to assist agents in the execution of this warrant. Once issued, the search warrant will be presented to Google with direction that it identifies the accounts described in Attachment A to this affidavit, as well as other subscriber and log records associated with the accounts, as set forth in Section I of Attachment B to this affidavit.
- 118. The search warrant will direct Google to create an exact copy of the specified account and records.
- 119. I, and/or other law enforcement personnel will thereafter review the copy of the electronically stored data and identify from among that content those items that come within the items identified in Section II to Attachment B for seizure.
- skills, equipment, and software. It could also be very time-consuming. Searching by keywords, for example, can yield thousands of "hits," each of which must then be reviewed in context by the examiner to determine whether the data is within the scope of the warrant. Merely finding a relevant "hit" does not end the review process. Keywords used originally need to be modified continuously, based on interim results. Certain file formats, moreover, do not lend themselves to keyword searches, as keywords, search text, and many common email, database and spreadsheet applications do not store data as searchable text. The data may be saved, instead, in proprietary non-text format. And, as the volume of storage allotted by service providers increases, the time it takes to properly analyze recovered data increases, as well. Consistent with the foregoing, searching the recovered data for the information subject to seizure pursuant to this warrant may require a range of data analysis techniques and may take weeks or even months. All forensic analysis of the data will employ only those search protocols and methodologies reasonably designed to identify and seize the items identified in Section II of Attachment B to the warrant.

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121. Based on my experience and training, and the experience and training of other agents with whom I have communicated, it is necessary to review and seize a variety of email communications, chat logs and documents, that identify any users of the subject account and e-mails sent or received in temporal proximity to incriminating e-mails that provide context to the incriminating communications.

CONCLUSION 122. Based on the forgoing, I respectfully request that the Court issue the proposed 2 3 search warrant. Accordingly, by this Affidavit and Warrant I seek authority for the government to search all of the items specified in Section I, Attachment B (attached hereto 4 5 and incorporated by reference herein) to the Warrant, and specifically to seize all of the data, 6 documents and records that are identified in Section II to that same Attachment. 7 8 9 Andrew Cropcho, Affiant 10 Special Agent 11 12 The above-named agent provided a sworn statement attesting to the truth of the 13 foregoing affidavit on the _____ day of April, 2020. 14 15 16 THE HONORABLE BRIAN A. TSUCHIDA 17 United States Magistrate Judge 18 19 20 21 22 23 24 25 26 27 28

1 <u>ATTACHMENT A</u> 2 Google Accounts to be Searched 3 The electronically stored data, information and communications contained in, 4 related to, and associated with, including all preserved data associated with Google 5 accounts: 6 ivan@hashcoins.com (SUBJECT ACCOUNT 1) 7 ivan@burfa.com (SUBJECT ACCOUNT 2) 8 ivan.turygin@polybius.io (SUBJECT ACCOUNT 3) 9 turygin@gmail.com (SUBJECT ACCOUNT 4) 10 sergei@hashcoins.com (SUBJECT ACCOUNT 5) 11 sergei@burfa.com (SUBJECT ACCOUNT 6) 12 sergei.potapenko@polybius.io (SUBJECT ACCOUNT 7) 13 sergei.potapenko@gmail.com (SUBJECT ACCOUNT 8) 14 nikolay@hashcoins.com (SUBJECT ACCOUNT 9) 15 nikolay.pavlovskiy@burfa.com (SUBJECT ACCOUNT 10) 16 pavel@hashcoins.com (SUBJECT ACCOUNT 11) 17 pavel.tsihhotski@burfa.com (SUBJECT ACCOUNT 12) 18 pavel.tsihhotski@polybius.io (SUBJECT ACCOUNT 13) 19 stanislav.pavlov@hashcoins.com (SUBJECT ACCOUNT 14) 20 stanislav.pavlov@burfa.com (SUBJECT ACCOUNT 15) 21 vadim.tsvetikov@hashcoins.com (SUBJECT ACCOUNT 16) 22 vadim.tsvetikov@burfa.com (SUBJECT ACCOUNT 17) 23 vitali@hashcoins.com (SUBJECT ACCOUNT 18) 24 vitali@burfa.com (SUBJECT ACCOUNT 19) 25 vitali.pavlov@polybius.io (SUBJECT ACCOUNT 20) 26 anton.altement@polybius.io (SUBJECT ACCOUNT 21) 27 edger.bers@burfa.com (SUBJECT ACCOUNT 22) 28 edgar.bers@polybius.io (SUBJECT ACCOUNT 23)

1 tatjana@burfa.com (SUBJECT ACCOUNT 24) 2 margarita.burunova@hashcoins.com (SUBJECT ACCOUNT 25) 3 dalmeronprojects@gmail.com (SUBJECT ACCOUNT 26) 4 ecohousenetworks@gmail.com (SUBJECT ACCOUNT 27) 5 admin@hashcoins.com (SUBJECT ACCOUNT 28) 6 admin@burfa.com (SUBJECT ACCOUNT 29) 7 info@hashcoins.com (SUBJECT ACCOUNT 30) 8 info@burfa.com (SUBJECT ACCOUNT 31) 9 info@polybius.io (SUBJECT ACCOUNT 32) 10 invoices@hashcoins.com (SUBJECT ACCOUNT 33) 11 invoices@burfa.com (SUBJECT ACCOUNT 34) 12 azure@hashcoins.com (SUBJECT ACCOUNT 35) 13 microsoft@hashcoins.com (SUBJECT ACCOUNT 36) 14 cb@hashcoins.com (SUBJECT ACCOUNT 37) 15 licenses@hashcoins.com (SUBJECT ACCOUNT 38) alerts.mining@burfa.com (SUBJECT ACCOUNT 39) 16 support@polybius.io (SUBJECT ACCOUNT 40) 17 18 (the "Accounts") that are stored at a premises controlled by Google LLC, a company 19 that accepts service of legal process at 1600 Amphitheatre Parkway in Mountain 20 View, California. 21 22 23 24 25 26 27 28

1 | ATTACHMENT B 2 | Particular Things to be Seized

I. Information to be disclosed by Google, LLC:

To the extent that the information described in Attachment A is within the possession, custody, or control of Google, LLC ("Google"), including any data, messages, records, files, logs, or information that has been deleted but is still available to Google, or has been preserved pursuant to a request made under Title 18, United States Code, Section 2703(f), Google is required to disclose the following information to the government for each Account or identifier listed in Attachment A, from Account inception to the present:

- a. The contents of all emails associated with the account from April 2015 to the present, including stored or preserved copies of emails sent to and from the account, draft emails, the source and destination addresses associated with each email, the date and time at which each email was sent, and the size and length of each email;
- b. All records or other information regarding the identification of the account, to include full name, physical address, telephone numbers and other identifiers, records of session times and durations, the date on which the account was created, the length of service, the IP address used to register the account, log-in IP addresses associated with session times and dates, account status, alternative email addresses provided during registration, methods of connecting, log files, and means and source of payment (including any credit or bank account number);
 - c. all contact lists;
 - d. all Google Calendar content;
 - e. all Google Drive content (including backups of any apps stored on

24 Google Drive);

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- f. all Google Docs content;
- g. all Google Maps content;
- h. all Google Photos content;
- i. all Google Keep content;

1	j.	all Google Search Console content;		
2	k.	all Google Web & Activity content;		
3	1.	all Google Chrome Sync content;		
4	m.	all Google Location History content;		
5	n.	all Google Voice content;		
6	0.	all Android content, including, but not limited to active content and		
7	backups;			
8	p.	all Android Device console content;		
9	q.	all Android Market content;		
10	r.	all Google Hangouts content;		
11	s.	all Groups for Business content;		
12	t.	all Google Profile content, including all Google+ content;		
13	u.	all account history, including any records of communications between		
14	Google and any oth	er person about issues relating to the accounts, such as technical		
15	problems, billing in	equiries, or complaints from other users about the specified account. This		
16	to include records of contacts between the subscriber and the provider's support services, as			
17	well as records of any actions taken by the provider or subscriber in connection with the			
18	service.			
19	Google is he	reby ordered to disclose the above information to the government within		
20	14 days of service	of this warrant.		
21				
22	II. Information	to be seized by the government		
23	All informat	ion described above in Section I that constitutes fruits, contraband,		
24	evidence, and instrumentalities of violations of Title 18, United States Code, Section 1343			
25	(Wire Fraud), and o	occurring after April 2015, for each of the Accounts listed on Attachment		
26	A, pertaining to the	following matters:		
27	a.	Items, records, or information related to the operation of a		
28	cryptocurrency clou	ad mining Ponzi scheme;		

1	b. Items, records, or information related to cryptocurrency mining, the			
2	advertisement, manufacture and sale of mining equipment, or the advertisement and sale of			
3	cloud mining contracts;			
4	c. Items, records, or information related to the termination of mining			
5	contracts and the profitability of cloud mining;			
6	d. Items, records, or information related to purchases of cloud mining			
7	equipment, including communications with the companies Bitmain, Bitfury, and Inno3d;			
8	e. Items, records, or information related to the transfer, purchase, sale, or			
9	disposition of cryptocurrency;			
10	f. Items, records, or information related to communications with			
11	HASHFLARE or HASHCOINS investors, including complaints by investors or requests for			
12	return of funds;			
13	g. Items, records, or information related to the advertisement of			
14	HASHFLARE or HASHCOINS' services;			
15	h. Items, records, or information related to the owners, operators,			
16	employees, locations, assets, and business purpose of the companies HASHCOINS OU,			
17	HASHCOINS TRADE OU, HASHCOINS LP, HASHFLARE LP, Burfa Capital OU, Burfa			
18	Media OU, Burfa Real Estate OU, Burfa Tech OU, Burfa Trade OU, Burfa Invest OU,			
19	Polybius Foundation OU, Polybius Tech OU, Polybius Ventures OU, Polybius Fintech			
20	MidCo OU, Dalmeron Projects LP, and Ecohouse Networks LP (collectively, the			
21	"SUBJECT ENTITIES");			
22	i. Items, records, or information related to the use, creation, or operation			
23	of the "SUBJECT ENTITIES," including business plans and strategies, and the anticipated			
24	success, failure, or general validity thereof;			
25	j. Items, records, or information related to the operation of hashflare.io,			
26	burfa.com, polybius.io, or hashcoins.com;			
27	k. Items, records, or information concerning financial transactions			
28	associated with the operation of the SUBJECT ENTITIES, including bank accounts held by			

1	the SUBJECT ENTITIES, transfers of funds by the SUBJECT ENTITIES, expenditures of					
2	money or wealth, bank statements and other financial statements, and cryptocurrency					
3	holdings;					
4	Items, records, or information related to cryptocurrency mining groups,					
5	cryptocurrency public keys or addresses, cryptocurrency private keys, representations of					
6	cryptocurrency wallets or their constitutive parts, to include "recovery seeds" and "root					
7	keys," which may be used to regenerate a wallet.					
8	m. Items, records, or information related to the salaries or earnings of					
9	individuals employed by the SUBJECT ENTITIES.					
10	n. Items, records, or information related to the payment or calculation of					
11	recruitment bonuses paid to HASHFLARE and HASHCOINS investors.					
12	o. Items, records, or information related to receipt of investor money,					
13	including the amount, purpose of the investment, and plans for spending that money.					
14	p. Evidence indicating how and when the email account was accessed or					
15	used, to determine the geographic and chronological context of account access, use, and					
16	events relating to the crime under investigation and to the email account owner.					
17	q. Evidence indicating the email account owner's state of mind as it relates					
18	to the crime under investigation.					
19	r. The identity of the person(s) who created or used the user ID, including					
20	records that help reveal the whereabouts of such person(s).					
21						
22	This warrant authorizes a review of electronically stored information, communications, other records and information disclosed pursuant to this warrant in order to locate evidence, fruits,					
23	and instrumentalities described in this warrant. The review of this electronic data may be					
24	conducted by any government personnel assisting in the investigation, who may include, in addition to law enforcement officers and agents, attorneys for the government, attorney					
25	support staff, and technical experts. Pursuant to this warrant, the FBI may deliver a complet					
26	copy of the disclosed electronic data to the custody and control of attorneys for the government and their support staff for their independent review.					
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Affidavit in Support of Search Warrant MJ21-149 Affidavit in Support of Search Warrant MJ21-149 Affidavit in Support of Search Warrant MJ21-149	
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1	<u>AFFIDAVIT</u>							
2								
3	STATE OF WASHINGTON) ss							
4	COUNTY OF KING)							
5	I, Andrew Cropcho, being duly sworn, hereby depose and state as follows:							
6								
7	I am a Special Agent with the Federal Bureau of Investigation ("FBI") and							
8	have been since May of 2018. I am currently assigned to the Seattle Field Office. My							
9	primary duties include investigating violations of Federal law, including corporate fraud,							
10	securities fraud, government program fraud, and healthcare fraud. Part of those duties							
11	include investigating instances of wire fraud being used for financial gain at the expense of							
others. Before my career as an FBI Special Agent I was employed as a Certified Public								
13	Accountant for over three years and, as part of my employment, I examined financial							
14								
15	2. The facts set forth in this Affidavit are based on my own personal knowledge;							
knowledge obtained from other individuals during my participation in this investing including other law enforcement personnel; review of documents and records relatively.								
								18
19	circumstances described herein including, but not limited to, the victims in this investigation							
20	and information gained through my training and experience. Because this Affidavit is							
21	submitted for the limited purpose of establishing probable cause in support of the application							
22	for a search warrant, it does not set forth each and every fact that I or others have learned							
23	during the course of this investigation.							
24	PURPOSE OF AFFIDAVIT							
25	3. I make this affidavit in support of an application for a search warrant for							
26	information associated with certain accounts that are stored at premises controlled by Apple.							

Inc. ("Apple"), located at One Apple Park Way, Cupertino, California 95014. The

- pursuant to Title 18, United States Code, Sections 2703(a), 2703(b)(1)(A) and 2703(c)(1)(A) to require Apple to disclose to the government copies of the information, including the content of communications, further described in Section I of Attachment B, pertaining to the following accounts:
- a. Sergei.potapenko@gmail.com (DSID 624556209) ("SUBJECT ACCOUNT 1") (believed to be used by SERGEI POTAPENKO); and
- b. Turygin@gmail.com (DSID 1931852295) ("SUBJECT ACCOUNT 2") (believed to be used by IVAN TURYGIN); (hereinafter, collectively the "SUBJECT ACCOUNTS"). Upon receipt of the information described in Section I of Attachment B, government-authorized persons will review that information to locate the items described in Section II of Attachment B. This warrant is requested in connection with an ongoing investigation in this district by the FBI.
- 5. Based on my training and experience, and the facts as set forth in this affidavit, there is probable cause to believe that violations of Title 18, United States Code, Section 1343 (Wire Fraud) have been committed by IVAN TURYGIN and SERGEI POTAPENKO, individually, and by and through the use of their companies HASHCOINS OU (hereinafter "HASHCOINS"), HASHCOINS TRADE OU, HASHCOINS LP, HASHFLARE LP (hereinafter "HASHFLARE"), Burfa Capital OU, Burfa Media OU, Burfa Real Estate OU, Burfa Tech OU, Burfa Trade OU, Burfa Invest OU (collectively, the "BURFA Entities"), Polybius Foundation OU, Polybius Tech OU, Polybius Ventures OU, Polybius Fintech MidCo OU (collectively, "POLYBIUS"), and Dalmeron Projects LP, along with identified key employees of the same companies. There is also probable cause to search the information described in Attachment A, for evidence, instrumentalities, or contraband of these crimes, as described in Attachment B.

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JURISDICTION

- 6. This Court has jurisdiction to issue the requested warrant because it is "a court of competent jurisdiction" as defined by 18 U.S.C. § 2711. 18 U.S.C. §§ 2703(a), (b)(1)(A) & (c)(1)(A). Specifically, the Court is "a district court of the United States . . . that has jurisdiction over the offense being investigated." 18 U.S.C. § 2711(3)(A)(i).
- 7. Pursuant to 18 U.S.C. § 2703(g), the presence of a law enforcement officer is not required for the service or execution of this warrant.
- 8. This warrant application is to be presented electronically pursuant to Local Criminal Rule CrR 41(d)(3).

BACKGROUND ON VIRTUAL CURRENCY AND MINING

- 9. Virtual currency (also known as cryptocurrency) is an asset that can be exchanged directly person to person, through a virtual currency exchange, or through other intermediaries. It can be used to buy goods and services, exchanged for "fiat currency" (currency established by government regulation or law) or other virtual currency, or held as an investment, among other applications.
- 10. Virtual currency is generally not issued by any government or bank. Rather, it is frequently generated and controlled through software operating on a decentralized, peer-to-peer ("P2P") network of computers across the world (some types of virtual currency, however, are generated and controlled through software operating on a centralized network of computers across the world).
- 11. There are thousands of virtual currencies in use, including Bitcoin, Ethereum, Bitcoin Cash, and Monero. Bitcoin, the most popular form of virtual currency, can be generated through mining. According to Bitcoin.org, "Bitcoin mining is the process of making computer hardware do mathematical calculations for the Bitcoin network to confirm

¹ Since Bitcoin is both a virtual currency and a protocol, capitalization differs. Accepted practice is to use "Bitcoin" (singular with an uppercase letter B) to label the protocol, software, and community, and "bitcoin" (with a lowercase letter b) to label units of the virtual currency. That practice is adopted here.

transactions and increase security. As a reward for their services, Bitcoin miners can collect transaction fees for the transactions they confirm, along with newly created bitcoins."

- 12. Bitcoin mining can be conducted locally on a user's computer or other computer hardware, or can be conducted on another's system via the cloud. According to the Santa Clara Law School High Technology Journal: "Cloud mining is an economic arrangement whereby a person pays another person or entity to engage in cryptocurrency mining on their behalf and receives the transaction fees, cryptocurrency or a portion thereof that is generated from such mining efforts."
- 13. One measure for determining the effectiveness or processing power of a mining operation is to calculate the operation's hash rate. According to Bitcoin.org: "The hash rate is the measuring unit of the processing power of the Bitcoin network. The Bitcoin network must make intensive mathematical operations for security purposes. When the network reached a hash rate of 10 Th/s, it meant it could make 10 trillion calculations per second."
- 14. Bitcoin utilizes "public key cryptography," a mathematical algorithm that generates a pair of unique, corresponding keys: the "public key" and the "private key." These components form the "public address," which is used to send and receive bitcoins and can be shared. A public address is akin to a bank account number, and a private key is akin to a Personal Identification Number ("PIN") or password. Only the holder of a public address's private key can authorize transfers of virtual currency from that public address to another public address.
- 15. Many virtual currencies operate via a "blockchain," a record (or ledger) of every transaction ever conducted that is distributed throughout the computer network (as opposed to being maintained by any single administrator or entity). As to bitcoins, although the public addresses of those engaging in virtual currency transactions are recorded on a blockchain, the identities of the individuals or entities behind the public addresses are not recorded on these public ledgers. If, however, an individual or entity is linked to a public address, it may be possible to determine what transactions were conducted by that individual

or entity. Bitcoin transactions are therefore sometimes described as "pseudonymous," meaning that they are partially anonymous.

- 16. Virtual currency users typically employ a "wallet," a tool that can be used to manage public and private keys, interface with a blockchain, and to send or receive virtual currency. Wallets vary widely in terms of their format and technological sophistication. One variety, known as "hosted" (or "custodial") wallets, are virtual currency wallets controlled by a third-party—often, a company with a cloud-based, encrypted wallet platform that may be hosted on the company's servers. Users of hosted wallets may be able to access the company's platform through various digital devices, much like a traditional online banking experience. Hosted wallet providers include virtual currency exchanges, which allow their customers, for a fee, to exchange virtual currency for other virtual currencies and/or fiat currencies.
- 17. A more detailed description of virtual currencies, blockchains, and law enforcement techniques for investigating virtual currency transactions, is included below.

STATEMENT OF PROBABLE CAUSE

A. Summary of Investigation

- 18. The FBI is investigating whether two Estonian residents, IVAN TURYGIN² and SERGEI POTAPENKO, illegally operated a Ponzi scheme, in violation of 18 U.S.C. § 1343, by fraudulently inducing individuals to invest in cryptocurrency mining.
- 19. Individuals can earn cryptocurrency by engaging in mining, which involves using computing power to solve a complicated algorithm to verify and record payments on the blockchain. Individuals are rewarded for this task by receiving newly created units of a cryptocurrency. Cryptocurrency mining typically involves the use of high-powered computers and the expenditure of large amounts of electricity.
- 20. HASHFLARE LP ("HASHFLARE"), incorporated in the UK and based in Estonia, claimed that it was engaged in cloud mining, using a cloud-based platform to mine

² IVAN TURYGIN's name is also spelled Ivan Turögin.

Bitcoin and alternative cryptocurrency coins. HASHCOINS OU ("HASHCOINS"),
incorporated and based in Estonia, assisted HASHFLARE in this endeavor, providing
technical support, development and marketing of HASHFLARE and its subdomains. In
exchange for a monetary investment, individuals were told that they would receive a portion
of the mining proceeds.

- 21. In July 2018, HASHFLARE stopped paying investors annual returns, claiming that cryptocurrency mining was no longer profitable. According to its terms of service, HASHFLARE informed investors that it would stop cryptocurrency mining "if the Maintenance and Electricity Fees [are] larger than the Payout." Specifically, according to HASHFLARE's terms, "If mining remains unprofitable for 21 consecutive days the Service is permanently terminated . . . [and] Payouts and Fees will also be temporarily stopped."
- 22. Investors contend that, at the time HASHFLARE terminated its services, cryptocurrency mining was, in fact, profitable. After mining was terminated, investors, including those located in the United States, began identifying red flags which led them to believe that HASHFLARE was a Ponzi scheme that was not engaged in cryptocurrency mining.
- 23. In June 2019, Estonia's Cyber Crime Bureau notified the FBI that it was investigating whether IVAN TURYGIN and SERGEI POTAPENKO were operating a Ponzi scheme. As of June 20, 2019, the Estonian authorities identified approximately \$120 million³ in losses sustained by HASHFLARE investors.

B. HASHFLARE & HASHCOINS

- a. Incorporation and Ownership
- 24. HASHFLARE and HASHCOINS were incorporated in Estonia and the United Kingdom on the dates listed in the below chart.

³ In this Affidavit, all references to \$ refer to US Dollars.

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Date	Corporate Name	Country	Legal Form	Directors or Beneficial Owners	Current Name	Prior Names
6/13/13	HASHCOINS OU	Estonia	Private Limited Company	TURYGIN & POTAPENKO	Burfa Tech OU	N/A
11/26/14	HASHCOINS TRADE OU	Estonia	Private Limited Company	TURYGIN & POTAPENKO	Burfa Trade OU	N/A
12/14/15	HASHFLARE LP	UK	Limited Partnership	Malter Capital LTD & MS- Proxy Services LTD	HASHFLARE LP	Fast Consult Trade LP & HASHCOINS LP

25. HASHFLARE maintained the website hashflare.io, while HASHCOINS maintained the website www.hashcoins.com. According to HASHCOINS' and HASHFLARE's websites, POTAPENKO was identified as a co-founder and CEO of the entities. According to public reporting, TURYGIN was a co-founder and Business Development Chairman of HASHCOINS. TURYGIN was also identified as a co-founder of HASHFLARE.

b. Business Operations

- 26. Beginning on or before April 18, 2015, HASHFLARE offered cloud mining services on its website. According to its website, HASHFLARE advertised the following: "Our service makes cryptocurrency mining available to every user. You no longer need to buy expensive equipment and spend your time setting up miners. Just select your desired capacity and earn income!" On another portion of its website, HASHFLARE advertised that "Cloud mining offers a unique option for mining with a low cost of entry as well as minimal risk and expense, which is opposite to traditional models of mining that involve procurement, maintenance and configuration of highly specialized software."
- 27. HASHFLARE advertised that it conducted this mining in collaboration with HASHCOINS. On its website, HASHFLARE explained that it offered "a new range of cloudmining services brought to you by the HASHCOINS team of cryptomining experts." In turn, on its website, HASHCOINS claimed that it was "an Estonian based cryptocurrency

- 28. HASHFLARE sold cloud mining contracts, allowing users to mine cryptocurrency through HASHFLARE in exchange for a return. On its website, HASHFLARE explained that a user could "purchas[e] part of the mining power of hardware hosted and owned by a Cloud Mining services provider," which "configur[es] the hardware, maintain[s] uptime and select[s] the most efficient and reliable [mining] pools." For example, on April 18, 2015, for \$9.95, a user could buy one million hashrate ("one million hash per second" or "1 MH/s") from HASHFLARE. For this rate, HASHFLARE advertised a "100% Scrypt Miner," automatic accruals in Bitcoin, and a daily maintenance fee of \$0.01 per 1/MH/s.
- 29. HASHFLARE's website advertised a tool that could be used to calculate the approximate amount of profit a user would get depending on the amount of hashrate the user purchased. The user would then have the option to automatically reinvest that profit or withdraw the profit if their balance was above a certain minimum threshold, which fluctuated between 0.5 bitcoin to 0.01 bitcoin throughout the existence and operation of HASHFLARE.
- 30. In addition to earning funds through cloud mining, HASHFLARE users also earned funds by recruiting others to purchase HASHFLARE contracts. HASHFLARE advertised a referral program, informing users that "as a referrer, you are eligible to receive 10% referral commission bonus for every purchase made by any of your referrals, excluding reinvest and balance purchases." As a result, HASHFLARE users could make money each time one of their referred friends, family members or acquaintances purchased cloud mining contracts.
- 31. A number of individuals, including those operating in the Western District of Washington purchased mining contracts from HASHFLARE. According to financial records

obtained from Fedwire, a funds transfer system operated by the United States Federal Reserve Banks, at least \$2.5 million was transferred to accounts held by HASHCOINS for what appear to be investments in HASHFLARE (examples of descriptions accompanying the transfer of money were: "HASHFLARE.io Invoice..."; "Investments..."; and "...payment for mining services").

- 32. According to bank records obtained from Latvia, approximately \$11 million was transferred into an account held by HASHFLARE at Latvijas Pasta Banka. These transfers were made in the names of various individuals, and often referenced the terms "Invoice" and "Hashrate." As a result, I believe that these payments were also made to purchase cloud mining contracts from HASHFLARE. For example, on January 31, 2017, F.R.E. transferred \$1,708 to HASHFLARE's account, referencing "Invoice 593395 Hashflare.io SHA-256 HASHRATE 15." Similarly, on March 6, 2017, A.K. transferred \$5,792.72 to HASHFLARE's account, referencing "Invoice .673156 (60TH/S SHA-256 hashrate).
- 33. Additionally, according to information obtained from a group of approximately 800 investors, a representative of which contacted law enforcement, between initial investments and re-investments of stated profits, they invested a total of \$7.5 million. It was not readily apparent how much of the \$7.5 million was contained within the amounts previously mentioned above.
- 34. A search of email accounts affiliated with HASHFLARE and HASHCOINS revealed a bank statement, with a date range from January 1, 2017 through September 21, 2018, showing approximately \$120 million of deposits into a bank account with the account owner name of "Hashflare LP". The description of most of the deposits was: "Payment from VISA/Mastercard, card processing dd...." A substantial amount of the deposits stopped in or around June of 2018. Based on the same email account review, I know the statements related to a main bank account that received deposits from users of the mining services.

c. Collapse of Mining Operations

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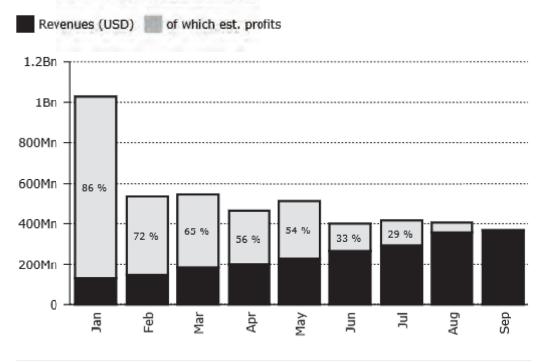
- 35. In or around August of 2017, HASHFLARE made a number of changes to its operations. For example, HASHFLARE changed its terms of service that shortened the length of all Bitcoin mining contracts from "lifetime" contracts to "one year" contracts. Functionally speaking, under lifetime contracts purchased hashrates did not expire, whereas under the new term the purchased hashrates expired after one year, requiring users to buy additional contracts.
- 36. In or around July 2018, HASHFLARE also required all users to submit "Know Your Customer" identification before they could continue using services offered on the platform. In effect, these additional procedures reduced the ability of users to withdraw funds earned through mining. On online forums, users complained that, even after they submitted the necessary documentation, HASHFLARE was taking weeks or months to verify their identities and pay balances. Other users complained that they never received their requested balances.
- 37. Finally, on July 20, 2018, HASHFLARE announced that Bitcoin mining had been unprofitable for 28 days as of July 18, 2018 and, per clause 5.5 of its Terms of Service, all Bitcoin mining SHA-256 contracts were suspended. According to its terms of service, HASHFLARE informed investors that it would stop cryptocurrency mining "if the Maintenance and Electricity Fees [are] larger than the Payout." Specifically, according to HASHFLARE's terms, "If mining remains unprofitable for 21 consecutive days the Service is permanently terminated . . . [and] Payouts and Fees will also be temporarily stopped."
- 38. One week later, on July 27, 2018, HASHFLARE informed the public that SHA-256 would resume on July 28, 2018. However, a review of archived copies of the HASHFLARE website showed SHA-256 mining contract remained "Out of Stock" over a year later.
- 39. Furthermore, interviews of three HASHFLARE investors, F.M., B.J., and F.W., revealed that it was not possible to make any withdrawals once the Bitcoin mining contracts were suspended, which held true through the dates of the interviews that took place

in or around September of 2019. Since then, there has been no indication from known victims that any of the money invested was recoverable from HASHFLARE.

- 40. Since HASHFLARE suspended its contracts, investors, including those located in the United States, began identifying red flags which led them to believe that HASHFLARE was a Ponzi scheme that was not engaged in cryptocurrency mining. Instead, they believed that HASHFLARE was profiting on fluctuations in cryptocurrency exchange rates, using those gains and new investment proceeds to repay earlier investors. For example, investors visited HASHFLARE's business address in Estonia, which did not appear to house a server farm or computing equipment consistent with cryptocurrency mining. Additionally, according to these investors, the rates charged by HASHFLARE for maintenance and electricity were above market average, and pools that were used to mine did not produce the expected output.
- 41. Diar, which publishes a digital assets and regulations newsletter, reported that while bitcoin mining was profitable for the first six months of 2018, with 2018 revenues exceeding 2017 revenues by \$1.4 billion, as of the end of August and the beginning of September, bitcoin mining was becoming unprofitable.⁴ According to Diar, increases in electricity costs and mining difficulty (increased hashrate) have led to this unprofitability. For example, a chart compiled by Dial is referenced below:

28 Diar, Bitcoin Miner Revenues Near \$5 Billion but Profitability Dwindles, Volume 2, Issue 40, (Oct. 8, 2018), available at https://diar.co/volume-2-issue-40/.

2018: Miners Paying Retail Electricity Prices Now Unprofitable...



Notes: Profit Estimates Using S9 Miners & \$0.1/kWh, No Pool Fees or Hardware Costs. The chart is illustrates profits if all miners paid retail electricity prices.

- 42. While Diar projected that mining did not become unprofitable until late August and early September 2018, HASHFLARE contended that its mining operations became unprofitable in late June 2018. However, HASHFLARE's operations may be more costly than those profiled by Diar, which did not take pool fees or hardware costs into account. HASHFLARE's terms of service provide that users must pay the following maintenance fees: "hardware setup, data center rent, Mining Pool testing, staff salaries, future planning and proofing, software development, exchange of used and out of order parts and other expenditures required to render the service on a best-effort basis."
- 43. Estonian authorities analyzed 22,935 transfer chains related to HASHFLARE payout wallets to determine if payouts to investors were coming from mining pools, which would be the expected source of payouts. Based on their analysis, most of the payouts came from the wallets where Bitcoin deposits were received, and only 0.8% of payouts came from

mining pools. As a result, it appears that HASHFLARE may not have been engaged in substantial cryptocurrency mining, as previously advertised.

d. HASHFLARE's and HASHCOINS' Cloud Mining Capabilities

- 44. The FBI has been investigating whether HASHFLARE and HASHCOINS possessed sufficient mining equipment to service the contracts that had been purchased. On its website, HASHFLARE claims that, when the company began in 2015, it conducted cloud mining using equipment obtained from HASHCOINS. As referenced above, investors questioned whether HASHCOINS had the capability to mine cryptocurrency, since they did not appear to have a large server location (or at least none was found).
- 45. Additionally, in 2014, HASHCOINS initially sold mining equipment, to be operated by the purchasing user. However, during that time frame, HASHCOINS claimed that it experienced supply disruptions, frustrating its ability to supply Bitcoin mining equipment. As a result, HASHCOINS offered its customers the opportunity to invest in HASHFLARE's cloud mining services, instead. Investors questioned whether this transition was intentional, to ensure that additional investors sent funds to HASHFLARE, and whether HASHCOINS had the ability to produce cloud mining equipment.
- Law enforcement has reviewed various financial records, along with email 46. records, to determine what cloud mining resources were purchased by HASHFLARE. Based on these records, it appears that, at various times, HASHCOINS or HASHFLARE contracted with Keleta UAB, Bitmain, Bitfury, and Inno3d vendors to provide cloud mining services. These services at described below and depicted in the following visual chart.

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April 2015: HASHFLARE Began Advertising Cloud Mining		September 2017: HASHCOINS rented Bitmain Miners from Jeltan		October 2017- September 2018: Inno3d Servers Purchased		
				•	•	
	November 2015: HASHCOINS Contracted with Keleta		October & November 2017: Bitfury Servers Delivered		July 2018: HASHFLARE Suspended Bitcoin Mining	

- 47. In 2015, it appears that HASHCOINS entered into a Mining Hardware Rent Agreement with a Lithuanian company named Keleta UAB. Specifically, on October 31, 2015, HASHCOINS entered into a contract with Keleta UAB for the purpose of renting SHA-256 Protocol cryptocurrency mining hardware. Pursuant to the terms of this contract, over the course of one year, HASHCOINS obtained € 600,000 worth of hashrate. The service was set to start on November 1, 2015. A further search of the email accounts provided a HASHCOINS bank statement, with a date range of January 1, 2015 through February 24, 2017, showing that HASHCOINS transferred \$575,000 to Keleta UAB. Attached to certain email were six invoices, issued from Keleta UAB to HASHCOINS, which totaled € 575,000.
- 48. Of note, there is no publicly available information regarding Keleta UAB that confirms that this company actually provides mining hardware. According to public databases, the address listed on the cryptocurrency mining contract for Keleta UAB also serves as the registered address for numerous other Lithuanian companies. Based on my training and experience, and information gained during the course of this investigation, I know that incorporation companies often register multiple companies, including shell companies, using the same business address.
- 49. In 2017, HASHFLARE and HASHCOINS entered into contracts with Bitmain, Bitfury, and Inno3d cloud mining vendors. This is consistent with HASHFLARE's website, where beginning on or before June 4, 2018, HASHFLARE advertised, albeit in broken

English, that it uses "equipment for mining" obtained from "Bitmain, Bitfury, Inno3d, and
others." Bitmain, Bitfury, and Inno3d each manufacture cryptocurrency mining equipment.
Because of the broken English, it is difficult to determine when HASHFLARE started using
mining equipment supplied by these companies, but it appears that HASHFLARE advertised
that it acquired this equipment in 2016. ⁵

- 50. While law enforcement has not identified evidence that HASHFLARE purchased mining equipment from Bitmain, Bitfury, or Inno3d in 2016, it has located evidence that a limited amount of funds was transferred to these vendors in 2017, during the final months of HASHCOINS' and HASHFLARE's operations.
- 51. First, according to an email sent to TURYGIN, on September 1, 2017, HASHCOINS entered into a contract with a UK company named Jeltan Trading LP for the purpose of renting Bitmain Antminer L3+ hardware. Pursuant to the terms of this contract, HASHCOINS purchased \$1,000,000 worth of hashrate over the course of a year. According to bank records HASHCOINS transferred € 918,000 to Jeltan Trading LP between September 19, 2017, and November 13, 2017.
 - 52. Of note, there is no publicly available information regarding Jeltan Trading LP that confirms that this company actually owns or rents mining hardware. According to public databases, the address listed on the cryptocurrency mining contract for Jeltan Trading LP also serves as the registered address for numerous other UK companies. Based on my training and experience, and information gained during the course of this investigation, I know that incorporation companies often register multiple companies, including shell companies, using the same business address.
 - 53. Second, according to information obtained from Bitfury, on August 3, 2017, Bitfury entered into an agreement to sell HASHCOINS ten "Bitfury B8 server[s] with proprietary BitFury hardware (16 nm) capable of producing up to 43 TH/s (±5%) of SHA

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⁵ The language states: "HashFlare is a cloud mining service created by the specialists from HashCoins in 2015. In a short time, HashFlare became one of the largest providers of computational power for mining bitcoin, litecoin, ethereum and other cryptocurrencies. From 2016, HashFlare is an independent company. The variety of equipment that is used for mining was significantly increased on the account such companies as Bitmain, Bitfury, Inno3d and others."

256 hashing power ('Hashing Power') and consuming 6.4 KW (±5%) of electricity" for \$52,000. Additionally, on September 25, 2017, Bitfury entered into a contract to sell HASHCOINS 462 "Bitfury Europe configured B8 server[s] with proprietary Bitfury hardware (16 nm) capable of producing up to 43 TH/s (±5%) of SHA 256 hashing power ('Hashing Power') and consuming 6.4 KW (±5%) of electricity." In exchange for these servers, HASHCOINS paid Bitfury \$984,984. Records from Bitfury show that shipments of these servers were made on October 16, 2017 and November 21, 2017. A review of emails between HASHCOINS and a representative of the Borealis Data Center (the final destination of the equipment), showed that the equipment was still in transit as of December 4, 2017.

- 54. Furthermore, on October 12, 2017, TURYGIN and a HASHCOINS representative exchanged emails with a Bitfury representative, discussing a "4M order next week right after 1M." The HASHCOINS representative explained that "the 4M order is . . . not yet confirmed." Based on the context of this email, I believe 4M to refer to 4 Megawatts. I have seen no evidence suggesting that such a large purchase was completed, which would likely amount to nearly \$4 million (the first round of purchases from BitFury resulted in 1 Megawatt of equipment being purchased for approximately \$1 million). Rather, according to banking records obtained to date, HASHCOINS first transferred funds to Bitfury on August 14, 2017, with another transfer of funds occurring on October 4, 2017. These funds transfers were consistent with the amounts identified in the above-mentioned contracts.
- 55. Thirdly, bank statements for both HASHCOINS and Burfa Media show that, between October of 2017 and September of 2018, approximately \$13 million was transferred to ASK Technology, which sells Inno3d-branded products. A search of email accounts belonging to Burfa Media personnel contained a summary of 23 invoices due to ASK Technology Group Limited, which totaled approximately € 16 million. Based on the

^{27 6} Bitfury also entered into subsequent agreements, in 2018, to sell equipment to HASHCOINS' successor, BURFA MEDIA OU.

The FBI is continuing to gather financial information related to this case and has, so far, obtained records from Latvia, Estonia, and the United States relating to HASHFLARE and HASHCOINS, among other entities.

discrepancy between payments made to ASK Technology and the invoice totals that were compiled by Burfa Media, the amount of product purchased from ASK Technology was unclear. 56. In addition to Bitfury, Bitmain, and Inno3d, law enforcement has identified evidence suggesting that payments were made to other cryptocurrency mining providers. For example, in January 2018, HASHCOINS transferred € 79,415.87 to BDC Mining EHF. According to publicly available information, BDC Mining EHF is based in Iceland. 58. Additionally, HASHFLARE transferred funds to Dalmeron Projects for "SHA-256" and "According to a Computational Power Rent Agreement from 16.02.2018." According to documents located in email accounts used by HASHFLARE and HASHCOINS personnel, Anatoli Sheipak serves as the "ultimate beneficial owner" of Dalmeron Projects. However, for the following reasons, it appears that the owners of HASHFLARE and HASHCOINS are the true beneficial owners of Dalmeron Projects. First, on August 1, 2017, TURYGIN emailed an incorporation company, requesting that a related company, Dalmeron Invest, be incorporated, listing Anatoli Sheipak as the director and owner of the entity. Additionally, on a document dated August 31, 2017 and entitled "MINING HARDWARE RENT AGREEMENT - AMENDMENT 1," between HASHCOINS and Dalmeron Projects, LP, the signatory for Dalmeron Projects was TURYGIN. Also, on October 26, 2017, GoDaddy sent POTAPENKO an email recommending that he renew the domain registration for dalmeron.com. Anatoli Sheipak was also listed as the sole subscriber for HASHFLARE's Microsoft account, suggesting that he is affiliated with HASHFLARE. And, finally, TURYGIN's email account, turygin@gmail.com, is linked by cookies to dalmeronprojects@gmail.com. Accordingly, based on my training and experience, and information gained during the course of this investigation, I believe that Dalmeron Projects is a subsidiary or is otherwise associated with HASHFLARE and HASHCOINS, rather than an independent company providing cloud mining services.

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 - 59. Similar to Dalmeron Projects, HASHCOINS transferred funds to another company named Ecohouse Networks LP, for "Computation power rent SHA-256(GH/s)", according to invoices dated as early as January of 2016, which were located in email accounts used by HASHFLARE and HASHCOINS personnel. However, on January 18, 2017, a bank application was sent via email by the representative of a payment processing company to TURYGIN, asking TURYGIN to see if the attached application was accurate. The bank application named Ecohouse Networks LP as the customer and named TURYGIN as the payment card user and sole beneficial owner. Additionally, a "HARDWARE LEASE CONTRACT" contract dated July 15, 2015, named HASHCOINS as the Tenant, represented by POTAPENKO, and Ecohouse Networks LP as the Lessor, represented by TURYGIN; the contract was not executed by either party. Accordingly, based on my training and experience, and information gained during the course of this investigation, I believe that Ecohouse Networks LP is a subsidiary or is otherwise associated with HASHFLARE and HASHCOINS, rather than an independent company providing cloud mining services.
 - 60. As described above, HASHCOINS and HASHFLARE began purchasing or renting cryptocurrency mining equipment from third parties in November 2015, with the bulk of their purchases occurring in the final months of their operations (September 2017 through June 2018). Based on financial records analyzed to date, users appeared to have begun transferring funds to HASHCOINS' bank accounts to purchase HASHFLARE mining contracts in or before November 2015. For example, on November 29, 2015, a transfer was made to an account held by HASHCOINS TRADE OU with the accompanying description: "Invoice #32789 ivanovdmi3i@list.ru HashFlare.io SHA-256 hashrate 300GH/s." These transfers were made before any known delivery of mining equipment was made by these vendors to HASHFLARE or HASHCOINS. Based on the above, the FBI is investigating whether HASHFLARE was soliciting and collecting investments for services it was not yet able to sufficiently perform.

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- 61. Additionally, since neither Jeltan Trading LP nor Keleta UAB have any appreciable public presence online, the FBI is also investigating whether those entities are legitimate, providing actual services to HASHFLARE or HASHCOINS.
- 62. Between at least August 2017 through June 2018, HASHFLARE and HASHCOINS had collectively transferred more than € 74 million to CryptoPay Ltd., a UK company that sells Bitcoin, purchases Bitcoin in exchange for fiat currency, and sells cards that can be loaded with cryptocurrency. For example, on August 7, 2017, HASHFLARE transferred € 250,000 to CryptoPay Ltd. for "digital assets purchase." Again, on August 14, 2017, HASHFLARE transferred an additional € 250,000 for "digital assets purchase." These payments continued through at least June 15, 2018, when HASHFLARE transferred € 2,000,000, also for "digital assets purchase." Based on these purchases, and the payment references, the FBI is investigating whether HASHFLARE was paying its investors using bitcoins purchased from CryptoPay, rather than mining bitcoins as advertised.
- 63. Furthermore, based on my training and experience, and information gained during the course of this investigation, I know that Ponzi schemes operate by recruiting others, paying earlier investors with funds transferred by later investors. Ponzi schemes often involve recruitment bonuses, incentivizing earlier investors to recruit friends and family members so that funds are available to pay earlier members. As described above, HASHFLARE advertised a referral program, paying earlier investors 10% bonuses based on cloud mining contracts purchased by those they referred.
- 64. HASHFLARE and HASHCOINS have stopped selling any mining contracts and, as described below, its founders and employees appear to have moved to successor companies that continue to operate in the cryptocurrency space. Prior investors have not been able to recoup their funds and many have been unable to transfer funds held in their accounts.
- 65. On December 29, 2020, an Estonian news company "DV" published an article describing a police investigation of POTAPENKO and TURYGIN. The article provided, in

part, that POTAPENKO and TURYGIN were being investigated for fraud that was facilitated through HASHFLARE's purported cloud-mining operations.

- 66. As part of this article, TURYGIN wrote to DV asserting that a Scottish firm, Fast Consult LP, bought the HASHFLARE cloud-mining operations in March 2016. According to TURYGIN, Fast Consult LP renamed itself to HASHCOINS LP, and later HASHFLARE. TURYGIN explained that HASHCOINS, a company he and POTAPENKO own, but which was distinguishable from HASHCOINS LP, which TURYGIN and POTAPENKO did not own, provided IT services and technical support to HASHFLARE for two years after its sale.
- 67. On December 31, 2020, TURYGIN published his own article in DV in response to the December 29, 2020, article, further claiming that HASHCOINS TRADE OU assisted HASHCOINS LP with accepting funds until the Fall of 2016, but after that HASHCOINS LP began to independently accept its own funds into their own accounts.
- 68. TURYGIN's assertions are not supported by the evidence gathered to date in this investigation. For example, an E-shop Agreement for payment card acceptance was signed by TURYGIN on or around May 24, 2017, which named IVAN TUROGIN as the authorized representative of HASHCOINS LP. According to the terms of the agreement, reports would be sent to the email address sergei@hashcoins.com, associated with POTAPENKO. The E-shop Agreement also provided that, while the legal address for HASHCOINS LP was listed as 44/46 Morningside Road, Suite 3, Edinburgh, EH10 4BF, Scotland, United Kingdom, the actual address provided was Tartu Mnt 43, 10128 Estonia the address utilized by Burfa, HASHCOINS, and Polybius, as well as TURYGIN's own Apple registration address. Furthermore, in an email dated January 30, 2017, POTAPENKO explained to the representative of a payment processing company that HASHCOINS LP operates in Estonia and not the United Kingdom.
- 69. I submit there is probable cause to believe HASHFLARE and HASHCOINS operated as a Ponzi scheme for at least the following reasons: (1) before its collapse, HASHFLARE appears to have been in financial distress, as evidenced by its unilateral

conversion of mining contracts from lifetime contracts to year-long contracts, its use of KYC requirements to delay users' withdrawal of funds from their accounts, and its termination of mining contracts during a time when industry press considered bitcoin mining to be profitable; (2) HASHCOINS' questionable ability to manufacture cryptocurrency mining equipment, as evidenced by its 2014 decision to not fulfill equipment orders and instead convert purchase contracts to HASHFLARE cloud mining contracts; (3) Estonian law enforcement's analysis that HASHFLARE wasn't receiving substantial payouts from mining pools, sufficient to pay its investors; (4) HASHFLARE's apparent purchase of "digital assets" from CryptoPay, which, among other items, sells Bitcoin, suggesting that HASHFLARE may be purchasing cryptocurrency rather than mining it; (5) HASHFLARE's inherent structure, including its referral program and lack of transparency regarding its mining pools, which is a common structure evidenced in Ponzi schemes; (6) TURYGIN's public attempt to mask true ownership of the now-defunct cloud-mining company; and (7) as described in further detail below, HASHFLARE's dissolution and the subsequent transition of its employees and co-founders, who joined new companies that continue to operate in the cryptocurrency space.

C. Other Linked Entities

a. BURFA Entities

- 70. After HASHFLARE terminated its mining contracts, HASHCOINS OU changed its legal name to Burfa Tech OU and HASHCOINS TRADE OU changed its name to Burfa Trade OU. As described below, a number of HASHCOINS and HASHFLARE employees then transferred and started working for these entities.
- 71. Burfa Tech OU and Burfa Trade OU are part of a conglomerate formed by TURYGIN and POTAPENKO, under the umbrella company Burfa Capital OU, incorporated in Estonia (collectively called the "BURFA Entities"). These entities are described below:

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Date	Corporate Name	Country	Legal Form	Directors or Beneficial Owners	Prior Names
7/12/13	Burfa Capital OU	Estonia	Private Limited Company	TURYGIN & POTAPENKO	Starfix UU
6/27/13	Burfa Media OU	Estonia	Private Limited Company	TURYGIN & POTAPENKO	N/A
7/17/17	Burfa Real Estate OU	Estonia	Private Limited Company	Pavel Ivanov	Burfa Estate OU
6/13/13	Burfa Tech OU	Estonia	Private Limited Company	TURYGIN & POTAPENKO	HASHCOINS OU, Euro Host UU
11/26/14	Burfa Trade OU	Estonia	Private Limited Company	TURYGIN & POTAPENKO	HASHCOINS Trade OU, Habalink UU
6/27/13	Burfa Invest OU	Estonia	Private Limited Company	TURYGIN & POTAPENKO	N/A

- 72. According to the website for Burfa Capital, burfa.com, the various entities have the following missions:
- a. Burfa Capital OU "is a commercial organization . . . emphasizing collaboration and investment in such priority areas as IT, fintech and data processing."
 Burfa Capital OU appears to be the parent corporation in the BURFA Entities conglomerate.
- Burfa Media OU "provides computing equipment for processing large data arrays and for any operations that require significant computing power."
- c. Burfa Real Estate OU "is engaged in the construction of commercial and residential luxury real estate in Estonia . . . for the subsequent sale or rent."
- d. Burfa Tech OU is reported to be "a leader in the field of data center design and maintenance for the industrial sector . . . specializ[ing] in high-performance computing and turnkey data center solutions." Like HASHCOINS, Burfa Tech OU is reported publicly to be "an IT company operating in Estonia mainly in the field of equipment for cryptocurrency mining."
 - e. Burfa Trade OU "is engaged in the wholesale trade of timber materials."

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- f. Burfa Invest OU "is a globally recognized brand with three main vectors of development"—trade, real estate, and construction.
- 73. As described in the chart below, a number of the individuals employed by the BURFA Entities appear to have been formerly employed by HASHCOINS or HASHFLARE.

Name	Role in HASHCOINS or HASHFLARE	Role in BURFA Entities
SERGEI POTAPENKO	Co-Founder and CEO of HASHFLARE and HASHCOINS	Board Member & Co-Founder of Burfa Capital OU
IVAN TURYGIN	Co-founder of HASHFLARE and HASHCOINS	Board Member & Co-Founder of Burfa Capital OU
Nikolay Pavlovskiy	Chief Technology Officer of HASHCOINS, Vice President and Head of Business Development at HASHFLARE	Chief Technology Officer for Burfa Capital OU
Vitali Pavlov	Project Manager at HASHFLARE, Chief Product Officer at HASHCOINS	Chief Product Officer at Burfa Tech OU
Vadim Tsvetikov	Associated with HASHCOINS, as described above	Data Center Operation Director for Burfa Tech OU
Pavel Tsihhotski	Support and Community Manager for HASHCOINS	Former Head of Support for Burfa Capital OU
Stanislav Pavlov	Associated with HASHCOINS, as described above	Former Human Resources Manager and Customer Support for Burfa Tech OU
Tatjana Potapova	Chief Financial Officer for HASHCOINS	Chief Financial Officer for Burfa Media OU
Edger Bers	Public Relations Business Development Manager for HASHCOINS	Associated with BURFA Entities—possesses @burfa.com email address

- 74. Additionally, around the time the Bitcoin mining contracts were suspended, HASHFLARE transferred substantial assets to the BURFA Entities. For example, according to bank records gathered during the course of this investigation, two different bank accounts held in the name of HASHFLARE transferred approximately \$15.5 million to a bank account in the name of Burfa Media OU throughout the year in 2018.
- 75. The @burfa.com domain was established on August 22, 2017, listing two contact email addresses—admin@burfa.com and sergei@hashcoins.com (associated with POTAPENKO).

b. POLYBIUS

76. In addition to HASHCOINS, HASHFLARE, and the BURFA Entities, TURYGIN and POTAPENKO have also formed a second conglomerate, comprised of four entities—Polybius Foundation OU, Polybius Tech OU, Polybius Ventures OU, and Polybius Fintech MidCo OU (collectively, referred to as "POLYBIUS").

77. Each of these entities was incorporated in Estonia, as listed below:

Date	Corporate Name	Country	Legal Form	Directors or Beneficial Owners
2/13/17	Polybius Foundation OU	Estonia	Private Limited Company	TURYGIN, POTAPENKO & Anton Altement
2/1/18	Polybius Tech OU	Estonia	Private Limited Company	TURYGIN, POTAPENKO, Anton Altement & Vadim Gerassimov
2/8/18	Polybius Ventures OU	Estonia	Private Limited Company	TURYGIN, POTAPENKO & Anton Altement
4/25/18	Polybius Fintech MidCo OU	Estonia	Private Limited Company	TURYGIN, POTAPENKO, Anton Altement & Mathieu Hardy

- 78. According to the website for POLYBIUS, Polybius.io, and public reporting, the various entities have the following missions:
- a. Polybius Tech OU created a cryptocurrency wallet called OSOM Finance, designed to hold both Bitcoin and alternative coins.
- b. Polybius Ventures OU and Polybius Fintech MidCo OU are not separately described but are both subsidiaries in the POLYBIUS ecosystem.
- c. Polybius Foundation, according to its Prospectus (also known as a "Whitepaper"), is "a team of financial, security, legal and technical experts" who are raising funds to start Polybius Bank. The intent was for Polybius Bank to be a "fully digital bank accessible everywhere at any time. It will have all the functions of a classical bank, but will not host any branches, nor any physical front-offices and will rely fully on the latest digital technologies." The front of the prospectus reads, in part: "Polybius POWERED BY HASHCOINS."
- 79. According to an article written by Forbes on October 29, 2018, POLYBIUS raised approximately \$32 million dollars during its Initial Coin Offering ("ICO") in the summer of 2017. The symbol for the POLYBIUS coins is PLBT. As of the date of the

 writing of the article, no tangible product had been launched. In fact, it announced that it abandoned the prospect of opening a bank, and that it would develop a mobile app instead.

- 80. A cursory review of the POLYBIUS tokens was discussed in a law review article published by the Columbia Law Review in April of 2019, entitled "Coin-Operated Capitalism." In the article, the authors note that a "development team can unilaterally change the [POLYBIUS] tokens purchased by investors—or sometimes, propose changes that will not be adopted if a certain percentage of users do not object." The authors opine that the latter type of proposed changes that may be detrimental to investors may automatically take effect with no knowledge of the investor because (1) the default vote is inherently set to "yes," and (2) the investing public as a whole does not have the technical skills to monitor or understand the proposed changes a development team may make to the POLYBIUS tokens. To date, it is unknown whether any such changes occurred.
- 81. On November 17, 2018, POLYBIUS released a blog post announcing it was releasing a new personal finance management service called "OSOM." Later in 2019, POLYBIUS released instructions about how to transfer PLBT tokens from an investor's POLYBIUS Wallet to their OSOM Wallet. According to POLYBIUS, transfer of the PLBT tokens to the OSOM Wallet was important because the POLYBIUS Wallet would eventually no longer be functioning.
- 82. While the American versions of Apple's "App Store" and Google's "Play Store" have no results when searching for "POLYBIUS" and "OSOM," the same search on the United Kingdom versions shows that Polybius Tech Launched OSOM Finance in or around October of 2019. The App Store's version of OSOM Finance has about five reviews, and the Play Store's version of OSOM Finance has about 74 reviews. According to a description of OSOM Finance, the app is advertised as an "all-in-one crypto portfolio management app."
- 83. The POLYBIUS coin is still available for purchase as of today, and both the OSOM website and POLYBIUS website are still in existence.

84. As with the BURFA Entities, some of the individuals employed by POLYBIUS appear to have been formerly employed by HASHCOINS or HASHFLARE or the BURFA entities. As a result, it appears that POLYBIUS is a successor entity of HASHCOINS and HASHFLARE.

Name	Role in HASHCOINS, HASHFLARE or BURFA	Role in POLYBIUS
SERGEI POTAPENKO	Co-Founder and CEO of HASHFLARE and HASHCOINS	Co-Founder of POLYBIUS
IVAN TURYGIN	Co-founder of HASHFLARE and HASHCOINS	Co-Founder of POLYBIUS
Edgar Bers	Public Relations Business Development Manager for HASHCOINS	Product Manager for POLYBIU
Pavel Tsihhotski	Support and Community Manager for HASHCOINS	Associated with POLYBIUS (possesses @polybius.io email address)
Anton Altement	Associated with BURFA Entities (possesses @burfa.com email address)	CEO & Co-Founder of POLYBII
Vitali Payloy	Project Manager at HASHFLARE, Chief Product Officer at HASHCOINS	Former Product Manager POLYBIUS

D. TURYGIN and POTAPENKO's Use of Apple Services

- 85. According to records obtained from Apple, POTAPENKO registered for an iCloud account on January 22, 2012. The Apple ID for this account was sergei.potapenko@gmail.com and the account is assigned DSID 624556209. The login alias for this account is sergei.potapenko@icloud.com. According to Apple, as of May 2020, POTAPENKO backed up his bookmarks, contacts, iOS Devices, iCloud Photos, Mail, Messages, and Notes using this account.8 Between 2017 and 2020, POTAPENKO registered three MacBook Pros, and Apple TV, and an iPhone to this account.
- 86. According to records obtained from Apple, TURYGIN registered for an iCloud account on June 24, 2012. The Apple ID for this account was turygin@gmail.com and the account is assigned DSID 1931852295. According to Apple, as of May 2020, TURYGIN

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⁸ According to Apple, as of May 2020, for this account, there were no logs associated with FaceTime, iCloud, IDS Queries or Mail during the prior 25 days.

backed up his bookmarks, contacts, Find My Friends, iOS Devices, iCloud Drive, iCloud Photos, Notes, and Photo Stream using this account. Between 2012 and 2018, TURYGIN registered two iPhones, two MacBook Pros, and one MacBook Air to this account.

- 87. I submit there is probable cause to search the **SUBJECT ACCOUNTS** for evidence of the HASHFLARE and HASHCOINS fraud. Specifically, there is probable cause to believe that the following types of records are maintained in these accounts.
- 88. Stored Chat Communications: Stored chats, including in Apple Messages, not only may contain communications related to the fraud perpetrated by HASHCOINS and HASHFLARE, but also help identify participants in those crimes, including HASHCOINS' and HASHFLARE's founders, employees, and investors. For example, HASHFLARE used group chat mechanisms, including Telegram, to recruit investors and to communicate amongst members. On December 22, 2017, HASHFLARE sent an email stating "Dear friends, . . . So how was this year with HashFlare? It was a year of exploding growth and related challenges . . . Thousands of HashFlare users already chat in our Telegram groups." HASHFLARE then provided links to English and Russian language Telegram groups. Based on my training and experience, along with information learned during the course of this investigation, I know that a user can elect to backup encrypted communications, like Telegram, onto their iCloud account. These communications may contain fraudulent statements, made to solicit investments in HASHFLARE, or may identify additional victims of HASHFLARE or HASHCOINS' fraud. Notably, POTAPENKO also had iMessages backed up to his account.
- 89. **Contacts:** Address books and contact lists may help identify both the owner of the account and locate co-conspirators, including other individuals who exercise control and influence over HASHFLARE or HASHCOINS. Additionally, these address books may identify HASHFLARE or HASHCOINS' employees, providing further evidence of these entities' internal structure. They may also identify the owners and representatives of Jeltan

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⁹ According to Apple, as of May 2020, for this account, there were no logs associated with FaceTime, iCloud, IDS Queries or Mail during the prior 25 days.

Trading LP, Keleta UAB, and Dalmeron Projects, which would assist law enforcement in determining whether these companies are legitimate entities.

90. Photos and Videos: Similarly, HASHFLARE and HASHCOINS' representatives generated a number of videos and promotional materials. For example, HASHFLARE maintained a website, Twitter feed, YouTube account, and Facebook account, where representatives posted these photographs and videos. According to its Twitter feed, on April 19, 2018, HASHFLARE published a "trailer for a documentary about the construction of the new HashCoins computing centers in Iceland," linking to a video on YouTube. Similarly, on July 26, 2016, HASHFLARE posted the following photograph to its Twitter account, depicting a purported data center:



HashFlare @hashflare · Jul 26, 2016 Meanwhile in HashFlare Ethereum DC...



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Accordingly, photographs and videos stored in the SUBJECT ACCOUNTS may be evidence of HASHFLARE and HASHCOINS' solicitation of investors and presentation of fraudulent statements. These photographs and videos may be stored in iCloud Photos or PhotoStream. Furthermore, cryptocurrency addresses, private keys, recovery seeds, PGP keys, and passwords are often comprised of long and complex character strings, and in my training and experience, I know that many cryptocurrency users write down or otherwise

record and store such items because they are too long to commit to memory. These items may be recorded in the user's photographs, in emails, in cloud document storage, in chat applications, or in other applications on electronic devices.

- 91. **Documents:** Documents stored in the **SUBJECT ACCOUNTS** may identify the scope of HASHFLARE and HASHCOINS' criminal activity, including by recording lists of investors or identifying investment accounts. In my training and experience, I know that the commission of offenses in the manner set forth above necessarily requires the use of computers, smart phones, tablets, or other computer devices and storage media to access HASFIFLARE's website, cryptocurrency exchanges and wallets, connect with and recruit investors, and engage in transfers of digital currency. I have learned, through training and experience, that individuals who engage in these types of offenses in this way also commonly use such electronic devices to keep track of investors and co-conspirators; keep records of transactions and criminal proceeds, including funds deposited at cryptocurrency exchanges; and store copies of online chats, emails, and other promotional data in cloud-based accounts. For example, documents were located in Google accounts belonging to TURYGIN and POTAPENKO, including invoices, contracts, bank statements, and other documents relevant to the fraudulent scheme under investigation. These documents may be stored in iCloud Drives or Notes.
- 92. Calendar Data: Calendar data may reveal the timing and extent of criminal activity, including meetings attended by HASHFLARE and HASHCOINS' founders and travel to attend TCC promotional events. For example, according to information saved in TURYGIN and POTAPENKO's Google accounts, POTAPENKO and TURYGIN attended meetings regarding HASHFLARE, including a meeting held on November 20, 2019 to discuss HASHFLARE 2.0's Terms of Service.
- 93. **Web History and Search Data**: Web history and search data may show when users accessed websites, HASHFLARE's social media sites, HASHFLARE's YouTube videos, or other online locations associated with HASHFLARE and HASHCOINS.

Additionally, web searching may identify the wallet providers used by each user to hold their cryptocurrency.

- 94. iCloud Storage and Backup: I know that Apple's iCloud services collect and stores information about Apple devices registered to an iCloud account. If enabled, a user may backup settings, app data, communications, documents, and other data stored on Apple devices. If a device is backed up, encrypted communications, such as Telegram chats, may be stored in an iCloud backup. For the reasons outlined above, each of these categories of information are relevant to the crimes under investigation, and, therefore, iCloud data is also requested. In addition, I know, based on training and experience that perpetrators maintain copies of software programs and other applications, including, but not limited to, cryptocurrency client and wallet files, digital signature software and related authentication keys, as well as encryption software and related encryption keys. This data may also be reflected in an iCloud backup. Based on my training and experience, and information gained during the course of this investigation, I know that multiple backups, spanning a lengthy time period, may be saved in a user's iCloud account. Accordingly, although HASHFLARE and HASHCOMS ceased selling mining contracts in 2018, information related to this time period may still be stored on Apple's servers. This is particularly true because electronic devices, including computers and iPhones, purchased from 2012 until 2018 remain registered to TURYGIN's iCloud account. Additionally, electronic devices, including computers and an iPhone, purchased from 2017 until 2018 remain registered to POTAPENKO's iCloud account. Additionally, more recent information may uncover the proceeds of HASHFLARE and HASHCOINS' fraud, the beneficial ownership of successor and associated corporations, and efforts by POTAPENKO and TURYGIN to conceal their ownership in these entities—as evidence by the December 31, 2020 article, referenced above.
- 95. In order to gather evidence of operations of HASHCOINS, HASHFLARE, and other affiliated entities, including discussions of mining cryptocurrency and providing returns to investors, the United States is seeking records from the identified Apple accounts associated with POTAPENKO and TURYGIN.

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96. Based on the above, there is probable cause to believe that information contained in the SUBJECT ACCOUNTS could reveal, among other things: (1) the plans and strategies formed by the users of the SUBJECT ACCOUNTS to defraud investors and customers, (2) the actions taken to execute those plans, (3) the operations and relationship between the various entities, including assets transferred between those entities; (4) the extent and capacity of mining operations at HASHCOINS and HASHFLARE; (5) the location of assets paid by investors to HASHCOINS and HASHFLARE; and (6) information on where HASHFLARE and HASHCOINS store their server data, including data on the identity and investment of each HASHFLARE subscriber. Therefore, the United States seeks records and information from Apple related to each of the SUBJECT ACCOUNTS.

BACKGROUND CONCERNING ONLINE ACCOUNTS

- 97. As explained herein, information stored in connection with an online account may provide crucial evidence of the "who, what, why, when, where, and how" of the criminal conduct under investigation, thus enabling the United States to establish and prove each element or alternatively, to exclude the innocent from further suspicion.
- 98. In my training and experience, the information stored in connection with an online account can indicate who has used or controlled the account. This "user attribution" evidence is analogous to the search for "indicia of occupancy" while executing a search warrant at a residence. For example, communications, contacts lists, and images sent (and the data associated with the foregoing, such as date and time) may indicate who used or controlled the account at a relevant time.
- 99. Further, information maintained by the provider can show how and when the account was accessed or used. For example, as described below, providers typically log the Internet Protocol (IP) addresses from which users access the account, along with the time and date of that access. By determining the physical location associated with the logged IP addresses, investigators can understand the chronological and geographic context of the account access and use relating to the crime under investigation. This geographic and timeline information may tend to either inculpate or exculpate the account owner.

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Additionally, information stored at the user's account may further indicate the geographic location of the account user at a particular time (e.g., location information integrated into an image or video).

100. Stored electronic data may provide relevant insight into the account owner's state of mind as it relates to the offense under investigation. For example, information in the account may indicate the owner's motive and intent to commit a crime (e.g., communications relating to the crime), or consciousness of guilt (e.g., deleting communications in an effort to conceal them from law enforcement).

1. Apple's Services

- 101. Apple is a United States company that produces the iPhone, iPad, and iPod Touch, all of which use the iOS operating system, and desktop and laptop computers based on the Mac OS operating system. Apple provides a variety of services that can be accessed from Apple devices or, in some cases, other devices via web browsers or mobile and desktop applications ("apps"). As described in further detail below, the services include email, instant messaging, and file storage:
- 102. Apple provides email service to its users through email addresses at the domain names mac.com, me.com, and icloud.com.
- 103. iMessage and FaceTime allow users of Apple devices to communicate in realtime. iMessage enables users of Apple devices to exchange instant messages ("iMessages") containing text, photos, videos, locations, and contacts, while FaceTime enables those users to conduct video calls.
- 104. iCloud is a file hosting, storage, and sharing service provided by Apple. iCloud can be utilized through numerous iCloud-connected services, and can also be used to store iOS device backups and data associated with third-party apps. iCloud can be utilized to transfer data from an old device to a new device, including data derived from device backups and third-party applications.
- 105. iCloud-connected services allow users to create, store, access, share, and synchronize data on Apple devices or via icloud.com on any Internet-connected device. For

example, iCloud Mail enables a user to access Apple-provided email accounts on multiple Apple devices and on icloud.com. iCloud Photo Library and My Photo Stream can be used to store and manage images and videos taken from Apple devices, and iCloud Photo Sharing allows the user to share those images and videos with other Apple subscribers. iCloud Drive can be used to store presentations, spreadsheets, and other documents. iCloud Tabs enables iCloud to be used to synchronize webpages opened in the Safari web browsers on all of the user's Apple devices. iWorks Apps, a suite of productivity apps (Pages, Numbers, and Keynote), enables iCloud to be used to create, store, and share documents, spreadsheets, and presentations. iCloud Keychain enables a user to keep website username and passwords, credit card information, and Wi-Fi network information synchronized across multiple Apple devices.

- 106. Location Services allows apps and websites to use information from cellular, Wi-Fi, Global Positioning System ("GPS") networks, and Bluetooth, to determine a user's approximate location.
- 107. App Store and iTunes Store are used to purchase and download digital content. iOS apps can be purchased and downloaded through App Store on iOS devices, or through iTunes Store on desktop and laptop computers running either Microsoft Windows or Mac OS. Additional digital content, including music, movies, and television shows, can be purchased through iTunes Store on iOS devices and on desktop and laptop computers running either Microsoft Windows or Mac OS.
- ID. During the creation of an Apple ID, the user must provide basic personal information including the user's full name, physical address, and telephone numbers. The user may also provide means of payment for products offered by Apple. The subscriber information and password associated with an Apple ID can be changed by the user through the "My Apple ID" and "iForgot" pages on Apple's website. In addition, Apple captures the date on which the account was created, the length of service, records of log-in times and durations, the types of service utilized, the status of the account (including whether the account is inactive

or closed), the methods used to connect to and utilize the account, the Internet Protocol

address ("IP address") used to register and access the account, and other log files that reflect usage of the account.

109. Additional information is captured by Apple in connection with the use of an Apple ID to access certain services. For example, Apple maintains connection logs with IP

Apple ID to access certain services. For example, Apple maintains connection logs with IP addresses that reflect a user's sign-on activity for Apple services such as iTunes Store and App Store, iCloud, and the My Apple ID and iForgot pages on Apple's website. Apple also maintains records reflecting a user's app purchases from App Store and iTunes Store, "call invitation logs" for FaceTime calls, and "mail logs" for activity over an Apple-provided email account. Records relating to the use of the Find My iPhone service, including connection logs and requests to remotely lock or erase a device, are also maintained by Apple.

ID. When a user activates or upgrades an iOS device, Apple captures and retains the user's IP address and identifiers such as the Integrated Circuit Card ID number ("ICCID"), which is the serial number of the device's SIM card. Similarly, the telephone number of a user's iPhone is linked to an Apple ID when the user signs into FaceTime or iMessage. Apple also may maintain records of other device identifiers, including the Media Access Control address ("MAC address"), the unique device identifier ("UDID"), and the serial number. In addition, information about a user's computer is captured when iTunes is used on that computer to play content associated with an Apple ID, and information about a user's web browser may be captured when used to access services through icloud.com and apple.com. Apple also retains records related to communications between users and Apple customer service, including communications regarding a particular Apple device or service, and the repair history for a device.

111. Apple provides users with five gigabytes of free electronic space on iCloud, and users can purchase additional storage space. That storage space, located on servers controlled by Apple, may contain data associated with the use of iCloud-connected services,

including: email (iCloud Mail); images and videos (iCloud Photo Library, My Photo Stream, and iCloud Photo Sharing); documents, spreadsheets, presentations, and other files (iWorks and iCloud Drive); and web browser settings and Wi-Fi network information (iCloud Tabs and iCloud Keychain). iCloud can also be used to store iOS device backups, which can contain a user's photos and videos, iMessages, Short Message Service ("SMS") and Multimedia Messaging Service ("MMS") messages, voicemail messages, call history, contacts, calendar events, reminders, notes, app data and settings, and other data. Records and data associated with third-party apps may also be stored on iCloud; for example, the iOS app for Telegram, an instant messaging service, can be configured to regularly back up a user's instant messages on iCloud. Some of this data is stored on Apple's servers in an encrypted form but can nonetheless be decrypted by Apple.

112. In this case, I am investigating, among other things, TURYGIN and POTAPENKO's use of Apple accounts. In my training and experience, evidence of who was using an Apple ID and from where, and evidence related to criminal activity of the kind described above, may be found in the files and records described above. As previously described, stored emails, chats, and other files may not only contain communications relating to the crimes under investigation, but also help identify the participants in those crimes. Address books and contact lists may help identify others involved in HASHFLARE and HASHCOINS, including victim investors. Similarly, photographs and videos may help identify additional promotion materials created by HASHFLARE and HASHCOINS, or identify cryptocurrency wallet addresses. Documents may identify the scope of the criminal activity, including transactional information related to victims and the ultimate disposition of fraud proceeds. And calendar data may reveal the timing and extent of criminal activity and other information, including the formation of HASHFLARE and HASHCOINS and solicitation of investors. Search and browsing history may also constitute direct evidence of the crimes under investigation to the extent the browsing history or search history might include searches and browsing history related to HASHFLARE, HASHCOINS, or cryptocurrency mining, and other evidence of the crimes under investigation. In my training

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and experience, as already described above, I also know that the commission of the violations in the manner set forth above necessarily requires the use of computers, smart phones, tablets, or other computer devices.

- 113. In addition, the user's account activity, logs, stored electronic communications, and other data retained by Apple can indicate who has used or controlled the account. For example, subscriber information, email and messaging logs, documents, and photos and videos (and the data associated with the foregoing, such as geo-location, date and time) may be evidence of who used or controlled the account at a relevant time. As an example, because every device has unique hardware and software identifiers, and because every device that connects to the Internet must use an IP address, IP address and device identifier information can help to identify which computers or other devices were used to access the account. Such information also allows investigators to understand the geographic and chronological context of access, use, and events relating to the crime under investigation.
- additional evidence. For example, the identification of apps downloaded from App Store and iTunes Store may reveal additional services used to communicate with the victims or deposit cryptocurrency. In addition, I know that encrypted applications, including Telegram, which was used by the founders and members of HASHFLARE and HASHCOINS, can be backed up in a user's iCloud data. Therefore, Apple's servers are likely to contain stored electronic communications and information concerning subscribers and their use of Apple's services. Additionally, a successor entity to HASHFLARE and HASHCOINS, POLYBIUS, advertised that it was creating an Apple application as part of its operations.

INFORMATION TO BE SEARCHED AND THINGS TO BE SEIZED

115. Pursuant to Title 18, United States Code, Section 2703(g), this application and affidavit for a search warrant seeks authorization to require Apple, and their agents and employees, to assist agents in the execution of this warrant. Once issued, the search warrant will be presented to Apple with direction that it identifies the accounts described in

Attachment A to this affidavit, as well as other subscriber and log records associated with the accounts, as set forth in Section I of Attachment B to this affidavit.

- 116. The search warrant will direct Apple to create an exact copy of the specified account and records.
- 117. I, and/or other law enforcement personnel will thereafter review the copy of the electronically stored data and identify from among that content those items that come within the items identified in Section II to Attachment B for seizure.
- skills, equipment, and software. It could also be very time-consuming. Searching by keywords, for example, can yield thousands of "hits," each of which must then be reviewed in context by the examiner to determine whether the data is within the scope of the warrant. Merely finding a relevant "hit" does not end the review process. Keywords used originally need to be modified continuously, based on interim results. Certain file formats, moreover, do not lend themselves to keyword searches, as keywords, search text, and many common email, database and spreadsheet applications do not store data as searchable text. The data may be saved, instead, in proprietary non-text format. And, as the volume of storage allotted by service providers increases, the time it takes to properly analyze recovered data increases, as well. Consistent with the foregoing, searching the recovered data for the information subject to seizure pursuant to this warrant may require a range of data analysis techniques and may take weeks or even months. All forensic analysis of the data will employ only those search protocols and methodologies reasonably designed to identify and seize the items identified in Section II of Attachment B to the warrant.
- 119. Based on my experience and training, and the experience and training of other agents with whom I have communicated, it is necessary to review and seize a variety of communications, chat logs and documents, that identify any users of the subject account and communications sent or received in temporal proximity to incriminating communications that provide context to the incriminating communications.

CONCLUSION 2 120. Based on the forgoing, I respectfully request that the Court issue the proposed search warrant. Accordingly, by this Affidavit and Warrant I seek authority for the government to search all of the items specified in Section I, Attachment B (attached hereto and incorporated by reference herein) to the Warrant, and specifically to seize all of the data, documents and records that are identified in Section II to that same Attachment. 6 7 8 9 Andrew Cropcho, Affiant 10 Special Agent 11 12 The above-named agent provided a sworn statement attesting to the truth of the 13 foregoing affidavit on the 11th day of March, 2021. 14 15 16 THE HONORABLE JOHN L. WEINBERG 17 United States Magistrate Judge 18 19 20 21 22 23 24 25 26 27 28

1 | **ATTACHMENT A** 2 Apple Accounts to be Searched The electronically stored data, information and communications contained in, 3 4 related to, and associated with, including all preserved data associated with Apple 5 accounts: Sergei.potapenko@gmail.com (DSID 624556209) ("SUBJECT 6 a. 7 ACCOUNT 1"); and 8 Turygin@gmail.com (DSID 1931852295) ("SUBJECT ACCOUNT b. 9 2"); (collectively, the "Accounts") that are stored at a premises controlled by Apple, Inc., a 10 company that accepts service of legal process at One Apple Park Way, Cupertino, 11 12 California 95014. 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28

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ATTACHMENT B

Particular Things to be Seized

I. Information to be disclosed by Apple, Inc.:

To the extent that the information described in Attachment A is within the possession, custody, or control of Apple, Inc. ("Apple"), including any data, messages, records, files, logs, or information that has been deleted but is still available to Apple, or has been preserved pursuant to a request made under Title 18, United States Code, Section 2703(f), Apple is required to disclose the following information to the government for each Account or identifier listed in Attachment A, from Account inception to the present:

- a. All records or other information regarding the identification of the account, to include full name, physical address, telephone numbers, email addresses (including primary, alternate, rescue, and notification email addresses, and verification information for each email address), the date on which the account was created, the length of service, the IP address used to register the account, account status, associated devices, methods of connecting, and means and source of payment (including any credit or bank account numbers);
- b. All records or other information regarding the devices associated with, or used in connection with, the account (including all current and past trusted or authorized iOS devices and computers, and any devices used to access Apple services), including serial numbers, Unique Device Identifiers ("UDID"), Advertising Identifiers ("IDFA"), Global Unique Identifiers ("GUID"), Media Access Control ("MAC") addresses, Integrated Circuit Card ID numbers ("ICCID"), Electronic Serial Numbers ("ESN"), Mobile Electronic Identity Numbers ("MEIN"), Mobile Equipment Identifiers ("MEID"), Mobile Identification Numbers ("MIN"), Subscriber Identity Modules ("SIM"), Mobile Subscriber Integrated Services Digital Network Numbers ("MSISDN"), International Mobile Subscriber Identities ("IMSI"), and International Mobile Station Equipment Identities ("IMEI");
- c. The contents of all emails associated with the account from April 2015 to the present, including stored or preserved copies of emails sent to and from the account

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- d. The contents of all instant messages associated with the account from April 2015 to the present, including stored or preserved copies of instant messages (including iMessages, SMS messages, and MMS messages) sent to and from the account (including all draft and deleted messages), the source and destination account or phone number associated with each instant message, the date and time at which each instant message was sent, the size and length of each instant message, the actual IP addresses of the sender and the recipient of each instant message, and the media, if any, attached to each instant message;
- e. The contents of all files and other records stored on iCloud, including all iOS device backups, all Apple and third-party app data, all files and other records related to iCloud Photo Library, Photo Stream, iCloud Drive, Safari Browsing History, and all address books, contact and buddy lists, notes, reminders, calendar entries, images, videos, voicemails, device settings, and bookmarks;
- f. All activity, connection, and transactional logs for the account (with associated IP addresses including source port numbers), including FaceTime call invitation logs, messaging and query logs (including iMessage, SMS, and MMS messages), mail logs, iCloud logs, iTunes Store and App Store logs (including purchases, downloads, and updates of Apple and third-party apps), My Apple ID and iForgot logs, sign-on logs for all Apple services, Game Center logs, Find My iPhone and Find My Friends logs, logs associated with web-based access of Apple services (including all associated identifiers), and logs associated with iOS device purchase, activation, and upgrades;
 - g. All records pertaining to the types of service used;
 - h. Records identifying the location of the subscriber.
- i. All records pertaining to communications between Apple and any
 person regarding the account, including contacts with support services and records of actions

taken; and 2 j. All files, keys, or other information necessary to decrypt any data produced in an encrypted form, when available to Apple (including, but not limited to, the 3 4 keybag.txt and fileinfolist.txt files). 5 Apple is hereby ordered to disclose the above information to the government within 14 days of service of this warrant. 6 7 8 II. Information to be seized by the government 9 All information described above in Section I that constitutes fruits, contraband, evidence, and instrumentalities of violations of Title 18, United States Code, Section 1343 10 11 (Wire Fraud), and occurring after April 2015, for each of the Accounts listed on Attachment 12 A, pertaining to the following matters: 13 Items, records, or information related to the operation of a a. cryptocurrency cloud mining Ponzi scheme; 14 15 Items, records, or information related to cryptocurrency mining, the b. 16 advertisement, manufacture and sale of mining equipment, or the advertisement and sale of cloud mining contracts; 17 18 Items, records, or information related to the termination of mining 19 contracts and the profitability of cloud mining; 20 d. Items, records, or information related to purchases of cloud mining 21 equipment, including communications with the companies Jeltan Trading, Dalmeron 22 Projects, Ecohouse Networks LP, Dalmeron Invest, Keleta UAB, Bitmain, Bitfury, and 23 Inno3d; 24 Items, records, or information related to the transfer, purchase, sale, or e. disposition of cryptocurrency; 25 26 f. Items, records, or information related to communications with HASHFLARE or HASHCOINS investors, including complaints by investors or requests for 27 28 return of funds;

1	g. Items, records, or information related to the advertisement of
2	HASHFLARE or HASHCOINS' services;
3	h. Items, records, or information related to the owners, operators,
4	employees, locations, assets, and business purpose of the companies HASHCOINS OU,
5	HASHCOINS TRADE OU, HASHCOINS LP, HASHFLARE LP, Burfa Capital OU, Burfa
6	Media OU, Burfa Real Estate OU, Burfa Tech OU, Burfa Trade OU, Burfa Invest OU,
7	Polybius Foundation OU, Polybius Tech OU, Polybius Ventures OU, Polybius Fintech
8	MidCo OU, Dalmeron Projects LP, Jeltan Trading, Dalmeron Invest, Ecohouse Networks
9	LP, and Keleta UAB (collectively, the "SUBJECT ENTITIES");
10	i. Items, records, or information related to the use, creation, or operation
11	of the "SUBJECT ENTITIES," including business plans and strategies, and the anticipated
12	success, failure, or general validity thereof;
13	j. Items, records, or information related to the operation of hashflare.io,
14	burfa.com, polybius.io, dalmeron.com, or hashcoins.com;
15	k. Items, records, or information concerning financial transactions
16	associated with the operation of the SUBJECT ENTITIES, including bank accounts held by
17	the SUBJECT ENTITIES, transfers of funds by the SUBJECT ENTITIES, expenditures of
18	money or wealth, bank statements and other financial statements, and cryptocurrency
19	holdings;
20	 Items, records, or information related to cryptocurrency mining groups,
21	cryptocurrency public keys or addresses, cryptocurrency private keys, representations of
22	cryptocurrency wallets or their constitutive parts, to include "recovery seeds" and "root
23	keys," which may be used to regenerate a wallet.
24	m. Items, records, or information related to the salaries or earnings of
25	individuals employed by the SUBJECT ENTITIES.
26	n. Items, records, or information related to the payment or calculation of
27	recruitment bonuses paid to HASHFLARE and HASHCOINS investors.
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1	0.	Items, records, or information related to receipt of investor money,
2	including the amoun	nt, purpose of the investment, and plans for spending that money.
3	p.	Evidence indicating how and when the email account was accessed or
4	used, to determine t	he geographic and chronological context of account access, use, and
5	events relating to th	e crime under investigation and to the email account owner.
6	q.	Evidence indicating the email account owner's state of mind as it relates
7	to the crime under i	nvestigation.
8	r.	The identity of the person(s) who created or used the user ID, including
9	records that help rev	veal the whereabouts of such person(s).
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11		rizes a review of electronically stored information, communications, other ation disclosed pursuant to this warrant in order to locate evidence, fruits,
12	and instrumentalitie	es described in this warrant. The review of this electronic data may be
13		overnment personnel assisting in the investigation, who may include, in orcement officers and agents, attorneys for the government, attorney
14	support staff, and te	echnical experts. Pursuant to this warrant, the FBI may deliver a complete
15	~ *	ed electronic data to the custody and control of attorneys for the eir support staff for their independent review.
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1	CERTIFICATE OF AUTHENTICITY OF DOMESTIC
2	RECORDS PURSUANT TO FEDERAL RULES OF
3	EVIDENCE 902(11) AND 902(13)
4 5	I,
6	and my title is I am qualified to authenticate the records
7	attached hereto because I am familiar with how the records were created, managed, stored, and retrieved. I state that the records attached hereto are true duplicates of the original
	records in the custody of The attached records consist of
9	[GENERALLY DESCRIBE RECORDS (pages/CDs/megabytes)]. I
10	further state that:
11	a. all records attached to this certificate were made at or near the time of the
12	occurrence of the matter set forth by, or from information transmitted by, a person with
13	knowledge of those matters, they were kept in the ordinary course of the regularly conducted business activity of and they were made by as a
14	regular practice; and
15	b. such records were generated by''s electronic process or
16	system that produces an accurate result, to wit:
17	1. the records were copied from electronic device(s), storage medium(s),
18	or file(s) in the custody of in a manner to ensure that they are true
19	duplicates of the original records; and
20	2. the process or system is regularly verified by, and
21	at all times pertinent to the records certified here the process and system functioned properly
22	and normally.
23	I further state that this certification is intended to satisfy Rules 902(11) and 902(13) of
24	the Federal Rules of Evidence.
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28	Date Signature