**IN THE UNITED STATES DISTRICT COURT**
**FOR THE DISTRICT OF MASSACHUSETTS**

| | |
|---|---|
| **STRIKEFORCE TECHNOLOGIES, INC.,**<br><br>**Plaintiff,**<br><br>**v.**<br><br>**VASCO DATA SECURITY INTERNATIONAL, INC. and VASCO DATA SECURITY, INC.,**<br><br>**Defendants.** | Civil Action No. _____<br><br>**COMPLAINT FOR PATENT INFRINGEMENT**<br><br>**JURY TRIAL DEMANDED** |

## COMPLAINT AND JURY DEMAND

StrikeForce Technologies, Inc. (hereinafter "Plaintiff" or "StrikeForce") files this Complaint for patent infringement against VASCO Data Security International, Inc. and VASCO Data Security, Inc. (hereinafter, collectively, "Defendant" or "VASCO") for infringement of U.S. Patent Nos. 7,870,599; 8,484,698; and 8,713,701 (collectively, "Asserted Patents"). On personal knowledge as to Plaintiff's own actions, and on information and belief as to the actions of others, Plaintiff alleges as follows:

## NATURE OF THE ACTION

1. This is a patent infringement action by StrikeForce to end VASCO's unauthorized and infringing manufacture, use, sale, offering for sale, and/or importation of products and methods in the U.S. incorporating StrikeForce's patented inventions.

2. Plaintiff StrikeForce seeks monetary damages, pre-judgment and post-judgment interest, and injunctive relief for VASCO's past and on-going infringement of the Asserted Patents.

## THE PARTIES

3. Plaintiff StrikeForce Technologies, Inc. is a corporation organized and existing under the laws of the State of Wyoming, having its principal place of business located at 1090 King Georges Post Road, Edison, New Jersey 08837.

4. Upon information and belief, Defendant VASCO Data Security International, Inc. is a corporation organized under the laws of the State of Delaware, having its principal place of business located at 1901 South Meyers Road, Suite 210, Oakbrook Terrace, Illinois, 60181.

5. Upon information and belief, Defendant VASCO Data Security, Inc. is a wholly owned subsidiary of VASCO Data Security International, Inc. organized under the laws of the State of Delaware, having its principal place of business located at 293 Boston Post Road West, Suite 340, Marlborough, MA 01752.

## JURISDICTION AND VENUE

6. This is a civil action for patent infringement arising under the patent laws of the United States, Title 35, United States Code §§ 1, *et seq.*

7. This Court has jurisdiction over this action pursuant to 28 U.S.C. §§ 1331 and 1338(a).

8. Upon information and belief, Defendant VASCO maintains continuous and systematic contacts and directs its activities at residents of the Commonwealth of Massachusetts, including through its operation of a regular and established business location at 293 Boston Post Road West, Suite 340, Marlborough, MA 01752.

9. Venue is proper in this District pursuant to 28 U.S.C. §§ 1391(a)-(c) and 1400(b).

## JOINDER

10. Upon information and belief, the right to relief asserted against each defendant in this Complaint arises out of the same transaction, occurrence, or series of transactions or occurrences relating to the making, using, selling, offering for sale, and/or importing in the United States products, software, and/or services that incorporate or make use of one or more of the inventions covered by the Asserted Patents. Therefore, questions of fact common to all defendants will arise in this action and joinder of defendants under 35 U.S.C. § 299 is proper.

## STRIKEFORCE OUT-OF-BAND PATENTS AND PRODUCTS

11. U.S. Patent No. 7,870,599 (the "'599 patent"), titled "Multichannel Device Utilizing a Centralized Out-of-Band Authentication System (COBAS)," was duly and legally issued on January 11, 2011. StrikeForce Technologies, Inc. is the owner by assignment of all right, title, and interest in and to the '599 patent, including without limitation the right to sue and recover for past infringement thereof.

12. U.S. Patent No. 8,484,698 (the "'698 patent"), titled "Multichannel Device Utilizing a Centralized Out-of-Band Authentication System (COBAS)," was duly and legally issued on July 9, 2013. The '698 patent is a continuation of, and claims priority to, the '599 patent. StrikeForce Technologies, Inc. is the owner by assignment of all right, title, and interest in and to the '698 patent, including without limitation the right to sue and recover for past infringement thereof. A copy of the '698 patent is attached as Exhibit A to this Complaint.

13. U.S. Patent No. 8,713,701 (the "'701 patent"), titled "Multichannel Device Utilizing a Centralized Out-of-Band Authentication System (COBAS)," was duly and legally issued on April 29, 2014. The '701 patent is a continuation of, and claims priority to, the '599 and '698 patents. StrikeForce Technologies, Inc. is the owner by assignment of all right, title,

and interest in and to the ’701 patent, including without limitation the right to sue and recover for past infringement thereof. A copy of the ’701 patent is attached as Exhibit B to this Complaint.

14. The inventions of the ’599, ’698, and ’701 patents are directed to multichannel security systems and methods for authenticating a user seeking to gain access to, for example, Internet websites and VPN networks, such as those used for conducting banking, social networking, business activities, and other online services. This field of technology relates to what is sometimes referred to as “out-of-band” authentication, or a type of “two-factor” authentication.

15. StrikeForce offers a product called ProtectID® that performs out-of-band authentication according to the teachings of one or more of the Asserted Patents. StrikeForce has offered this product since August 2003, and ProtectID® has displayed the statutory patent notice for its issued patents at its website, www.strikeforcetech.com, since about February 2011. In particular, StrikeForce’s website identified the ’599 patent at least as early as February 2011; StrikeForce’s website identified the ’698 patent at least as early as October 2013; and StrikeForce’s website identified the ’701 patent at least as early as June 2014.

16. VASCO has been aware of StrikeForce’s out-of-band authentication products, including ProtectID®, since at least March 8, 2010, and at least the ’599 patent since at least November 10, 2011. For example, at the 2010 RSA Conference, StrikeForce met with representatives from VASCO, including Giovanni Verhaeghe, and showed VASCO its ProtectID® products. Upon information and belief, according to his LinkedIn profile, Mr. Verhaeghe has been Director Corporate Strategy and IPR at VASCO Data Security since October 2007.

17. StrikeForce remained in communication with representatives at VASCO, including Tom Barber, through November 2011. Upon information and belief, Mr. Barber was Director of Business Development at VASCO Data Security from February 2011 through December 2013. During this time, StrikeForce and VASCO discussed a potential partnership, with VASCO investing in StrikeForce's technology. At least as early as November 10, 2011, StrikeForce provided materials to Mr. Barber describing its Multi-Factor Authentication Platform and identifying StrikeForce's intellectual property, including the '599 patent. Upon information and belief, VASCO did not offer its own out-of-band authentication product until after it had learned of StrikeForce's Multi-Factor Authentication Platform and StrikeForce's intellectual property.

18. Upon information and belief, VASCO has had actual knowledge of the '698 patent and the '701 patent at least as early as, and no later than, the filing of this Complaint.

**VASCO INFRINGING PRODUCTS**

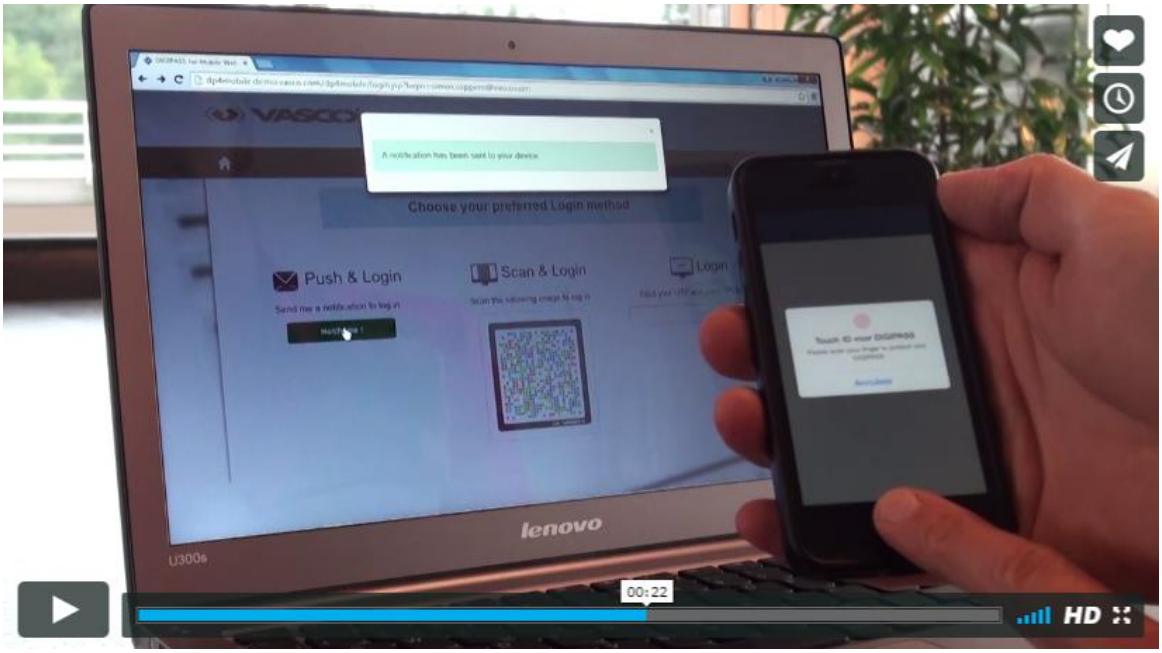
19. Upon information and belief, VASCO offers two-factor authentication products for use on Android and iOS devices in the United States and in this District. These products include, but are not limited to, the IDENTIKEY product family and DIGIPASS software ("Infringing Products").

20. Upon information and belief, VASCO's IDENTIKEY products ("IDENTIKEY") (using, for example, the DIGIPASS App) utilize out-of-band ("OOB") technology that sends a notification to the user's device when a login request is made to provide two-factor authentication with a mobile phone. IDENTIKEY is used as a server authentication tool to offer "secure and seamless access to corporate resources and applications of all kinds." *See, e.g.*, Exhibit D at 2. IDENTIKEY, when used in conjunction with other VASCO authentication

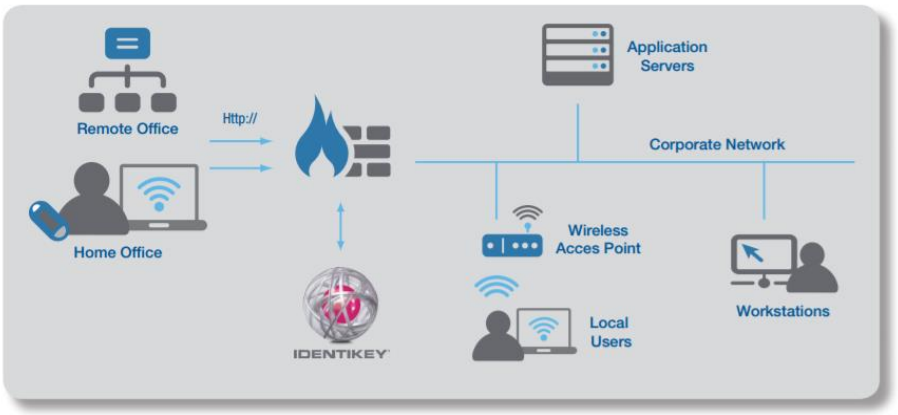
technologies (such as the DIGIPASS App), offers authentication with push notification. *See* Exhibit D at 3; "VASCO - Push Login" Notification Demonstration, available at https://www.vasco.com/glossary/push-notification.html, hereinafter "Push Notification Demo." When a user attempts to access a protected application, the user's request is redirected to IDENTIKEY, which sends a push notification out-of-band to the user's mobile device requesting authorization. *See, e.g.*, Exhibit E at 4; Exhibit F at 2-3; Push Notification Demo. When the push notification arrives on the user's mobile device, the user can respond to the request directly on the push notification, or tap on the notification to load additional request details within the DIGIPASS Mobile application and/or tap to approve the login request. *See, e.g.*, Exhibit F at 2-3; Push Notification Demo. Optionally, the user can log in using a fingerprint sensor or by using VASCO's face recognition technology. *See, e.g.*, Exhibit G at 2; Exhibit H at 1, Exhibit I at 3-4. Approval triggers delivery of a one time password ("OTP") to IDENTIKEY through an OOB channel. *See, e.g.*, Exhibit F at 2-3; Exhibit J at 12. Once the OTP authentication is validated by IDENTIKEY, access to the requesting application will be granted. *See, e.g.*, Exhibit F at 2-3; Exhibit I at 3-4; Push Notification Demo.

21. VASCO makes available an exemplary video showing a representative implementation of the authentication process. *See* Push Notification Demo. As demonstrated by VASCO's Push Notification Demo, a user attemps to log in to a protected application on a computer by clicking the "Push & Login" button in a web browser on their laptop. IDENTIKEY sends an out-of-band push notification to the DIGIPASS mobile application on a user's phone, notifying the user of the login attempt. Using his or her phone, the user can click on the notification alert or open the DIGIPASS Mobile application to approve of the login attempt. In this representative example, the system requires the user's fingerprint in order to grant access.

Once the user approves access from his or her phone, the user is automatically granted access to the website in the user's browser.




22. Upon information and belief, IDENTIKEY is designed to integrate with third-party applications that deploy multifactor authentication options using the DIGIPASS Mobile application in conjunction with IDENTIKEY. VASCO provides documentation and instructions for integrating notification-based authentication with third-party applications including, but not limited to, applications provided by Juniper Networks, CA Technologies (formerly Computer Associates), and Citrix Systems Inc.. *See, e.g.*, Exhibit E at 3, 10-11; *see also* Exhibit K at 26, 70-72; Exhibit L at 2. The following exemplary, high-level drawing indicates how IDENTIKEY can integrate with third-party applications and applications:




*See, e.g.*, Exhibit E at 4.

**COUNT I –INFRINGEMENT OF THE '698 PATENT**

23. StrikeForce incorporates by reference the averments set forth in paragraphs 1 through 22.

24. Pursuant to 35 U.S.C. § 271(a), VASCO has directly infringed and is continuing to directly infringe the '698 patent by making, using, selling, offering for sale, and/or importing in the United States and in this District products, software, and/or services that incorporate or make use of one or more of the inventions covered by the '698 patent, including, but not limited to, the Infringing Products, thereby directly infringing one or more claims of the '698 patent.

25. Upon information and belief, and as demonstrated by paragraphs 1 through 22 and the supporting exhibits to this Complaint, the Infringing Products satisfy each and every element of one or more claims of the '698 patent, for example, and without limitation, claim 1 of the '698 patent.

26. For example, and without limitation, the Infringing Products comprise software for employing a multichannel security system to control access to a computer (*e.g.*, software-based authentication platform of the IDENTIKEY authentication server and DIGIPASS software). *See, e.g.*, Exhibit D at 2-3; Exhibit F at 2-3; Push Notification Demo. The Infringing

Products receive at an interception device in a first channel a login identification demand to access a host computer also in the first channel (*e.g.*, an element of the system that intercepts the user's login request prior to granting access to the protected information in, for example, the computer or application). *See, e.g.*, Exhibit E at 2, 4; Exhibit G at 2; Exhibit M at 5; Push Notification Demo. The Infringing Products verify the login information (*e.g.*, by verifying the login information of the user). *Id.* The Infringing Products receive at a security computer in a second channel (*e.g.*, IDENTIKEY authentication server) the demand for access and the login identification and outputs a prompt requesting transmission of data (*e.g.*, push notification to user's mobile device requesting user to confirm or deny authorization). *See, e.g.*, Exhibit E at 3-4, 7; Exhibit F at 2-3; Exhibit J at 18; Exhibit L at 1; Exhibit N at 1-2; Push Notification Demo. The Infringing Products receive the transmitted data at the security computer, compares the transmitted data to predetermined data, and depending on the comparison of the transmitted and the predetermined data, outputs an instruction from the security computer to the host computer to grant access to the host computer or deny access thereto (*e.g.*, IDENTIKEY authentication or DIGIPASS software receive the user's response and output an instruction to the protected computer to grant or deny access to the requested protected computer or application based on that response). *See, e.g.*, Exhibit F at 2-3; Exhibit N at 1-2; Push Notification Demo.

27. VASCO has, under 35 U.S.C. § 271(b), indirectly infringed, and continues to indirectly infringe the '698 patent by, *inter alia*, inducing others to make, use, sell, offer for sale, and/or import into the United States the Infringing Products, and distributing, marketing, and/or advertising those products and web services covered by the '698 patent in this District and elsewhere in the United States. *See, e.g.*, *supra* ¶¶ 1−22.

28. VASCO has, under 35 U.S.C. § 271(c), indirectly infringed, and continues to indirectly infringe the ’698 patent by, *inter alia*, knowingly providing to its customers the Infringing Products, which constitute material components of an out-of-band authentication system and that was especially made or adapted for use in that system, which are not staple articles or commodities of commerce and which have no substantial, non-infringing use.

29. VASCO puts the Infringing Products into service and exercises control over said systems.

30. VASCO had and/or has knowledge of the ’698 patent, at least as early as the filing of this Complaint.

31. VASCO’s customers directly infringe one or more claims of the ’698 patent by, for example, integrating the claimed systems and methods directly into the customers’ web services and directly benefitting from the use of those systems. For example, upon information and belief, VASCO’s customers in the United States and in this District utilize the two-factor authentication system claimed in the ’698 patent for the purpose of gaining secure access to, exemplarily, various Internet websites and other secure networks.

32. Upon information and belief, VASCO knowingly provides its customers with products and web services that are used in a manner that infringes one or more claims of the ’698 patent.

33. Upon information and belief, through its marketing activities, instructions and directions, and through the sales and offers for sale of infringing systems and methods, VASCO specifically intends for, and/or specifically encourages and instructs, its customers to use its products and web services and knows that its customers are using its products and web services in an infringing manner.

34. As a direct and proximate result of VASCO's acts of infringing one or more claims of the '698 patent, StrikeForce has suffered injury and monetary damages for which StrikeForce is entitled to relief in the form of damages for lost profits and in no event less than a reasonable royalty to compensate for VASCO's infringement.

35. VASCO will continue to directly infringe one or more claims of the '698 patent, causing immediate and irreparable harm to StrikeForce unless this Court enjoins and restrains VASCO's activities, specifically the acts of making, using, selling, and offering for sale, as previously outlined. There are inadequate remedies available at law to compensate for this harm.

36. Upon information and belief, VASCO has knowingly, willfully, deliberately, and without lawful justification infringed one or more claims of the '698 patent in conscious disregard of StrikeForce's rights, making this case exceptional within the meaning of 35 U.S.C. § 285 and justifying treble damages pursuant to 35 U.S.C. § 284.

**COUNT II –INFRINGEMENT OF THE '701 PATENT**

37. StrikeForce incorporates by reference the averments set forth in paragraphs 1 through 36.

38. Pursuant to 35 U.S.C. § 271(a), VASCO has directly infringed and is continuing to directly infringe the '701 patent by making, using, selling, offering for sale, and/or importing in the United States and in this District products, software, and/or services that incorporate or make use of one or more of the inventions covered by the '701 patent, including, but not limited to, the Infringing Products, thereby directly infringing one or more claims of the '701 patent.

39. Upon information and belief, and as demonstrated by paragraphs 1 through 36 and the supporting exhibits to this Complaint, the Infringing Products satisfy each and every

element of one or more claims of the ’701 patent, for example, and without limitation, claim 1 of the ’701 patent.

40. For example, and without limitation, the Infringing Products comprise a security system for accessing a host computer (*e.g.*, software-based authentication platform of the IDENTIKEY authentication server and DIGIPASS software). *See, e.g.*, Exhibit D at 2-3; Exhibit F at 2-3; Push Notification Demo. The Infringing Products include an access channel comprising an interception device for receiving a login identification originating from an accessor for access to said host computer (*e.g.*, an element of the system that intercepts the user’s login request prior to granting access to the protected information in, for example, the computer or application). *See, e.g.*, Exhibit E at 2, 4; Exhibit G at 2; Exhibit M at 5; Push Notification Demo. The Infringing Products include, in an authentication channel, a security computer (*e.g.*, IDENTIKEY authentication server) for receiving from said interception device said login identification and for communicating access information to said host computer and for communicating with a peripheral device of said accessor (*e.g.*, push notification to user’s mobile device requesting user to confirm or deny authorization). *See, e.g.*, Exhibit E at 3-4, 7; Exhibit F at 2; Exhibit J at 18; Exhibit L at 1; Push Notification Demo. The Infringing Products include a database having at least one peripheral address record corresponding to said login identification (*e.g.*, database accessed by IDENTIKEY authentication server or DIGIPASS software for communicating with the user’s mobile device). *See, e.g.*, *See, e.g.*, Exhibit E at 3; Exhibit L at 2. The Infringing Products include, in an authentication channel, a prompt mechanism for instructing said accessor to enter predetermined data at and transmit said predetermined data from said peripheral device (*e.g.*, an element of the system that issues a push notification on the user’s mobile device prompting the user to confirm or deny authorization). *See, e.g.*, Exhibit F at

2-3; Exhibit N at 1-2; Push Notification Demo. The Infringing Products include, in an authentication channel, a comparator for authenticating access demands in response to the transmission of said predetermined data by verifying a match between said predetermined data and said entered and transmitted data, wherein said security computer outputs an instruction to the host computer to either grant access thereto using said access channel or to deny access thereto (*e.g.*, IDENTIKEY authentication server and DIGIPASS software receive the user's response and output an instruction to the protected computer to grant or deny access to the requested protected computer or application based on that response). *Id*.

41. VASCO has, under 35 U.S.C. § 271(b), indirectly infringed, and continues to indirectly infringe the '701 patent by, *inter alia*, inducing others to make, use, sell, offer for sale, and/or import into the United States the Infringing Products, and distributing, marketing, and/or advertising those products and web services covered by the '701 patent in this District and elsewhere in the United States. *See, e.g.*, *supra* ¶¶ 1−22.

42. VASCO has, under 35 U.S.C. § 271(c), indirectly infringed, and continues to indirectly infringe the '701 patent by, *inter alia*, knowingly providing to its customers the Infringing Products, which constitute material components of an out-of-band authentication system and that was especially made or adapted for use in that system, which are not staple articles or commodities of commerce and which have no substantial, non-infringing use.

43. VASCO puts the Infringing Products into service and exercises control over said systems.

44. VASCO had and/or has knowledge of the '701 patent, at least as early as the filing of this Complaint.

45. VASCO's customers directly infringe one or more claims of the '701 patent by, for example, integrating the claimed systems and methods directly into the customers' web services and directly benefitting from the use of those systems. For example, upon information and belief, VASCO's customers in the United States and in this District utilize the two-factor authentication system claimed in the '701 patent for the purpose of gaining secure access to, exemplarily, various Internet websites and other secure networks.

46. Upon information and belief, VASCO knowingly provides its customers with products and web services that are used in a manner that infringes one or more claims of the '701 patent.

47. Upon information and belief, through its marketing activities and through the sales and offers for sale of infringing systems and methods, VASCO specifically intends for, and/or specifically encourages and instructs, its customers to use its products and web services and knows that its customers are using its products and web services in an infringing manner.

48. As a direct and proximate result of VASCO's acts of infringing one or more claims of the '701 patent, StrikeForce has suffered injury and monetary damages for which StrikeForce is entitled to relief in the form of damages for lost profits and in no event less than a reasonable royalty to compensate for VASCO's infringement.

49. VASCO will continue to directly infringe one or more claims of the '701 patent, causing immediate and irreparable harm to StrikeForce unless this Court enjoins and restrains VASCO's activities, specifically the acts of making, using, selling, and offering for sale, as previously outlined. There are inadequate remedies available at law to compensate for this harm.

50. Upon information and belief, VASCO has knowingly, willfully, deliberately, and without lawful justification infringed one or more claims of the '701 patent in conscious

disregard of StrikeForce's rights, making this case exceptional within the meaning of 35 U.S.C. § 285 and justifying treble damages pursuant to 35 U.S.C. § 284.

## PRAYER FOR RELIEF

**WHEREFORE**, Plaintiffs pray for judgment against VASCO as follows:

A. Declaring that the '698 patent was duly and legally issued, and is valid and enforceable;

B. Declaring that the '701 patent was duly and legally issued, and is valid and enforceable;

C. Declaring that Defendant VASCO has infringed the '698 patent;

D. Declaring that Defendant VASCO has willfully infringed the '698 patent;

E. Declaring that Defendant VASCO has infringed the '701 patent;

F. Declaring that Defendant VASCO has willfully infringed the '701 patent;

G. Awarding to Plaintiffs damages caused by Defendant VASCO's infringement, including all lost profits resulting from VASCO's acts of infringement, and in no event less than reasonable royalties, together with pre-judgment and post-judgment interest and supplemental damages for any continuing post-verdict infringement up until entry of the final judgment, with an accounting, as needed, pursuant to 35 U.S.C. § 284;

H. Awarding to Plaintiffs treble damages for infringement of the'698 and '701 patents as a consequence of Defendant VASCO's willful infringement;

I. Enjoining VASCO, its officers, agents, servants, employees, attorneys, all parent and subsidiary corporations and affiliates, its assigns and successors in interest, and those persons in active concert or participation with VASCO who receive

notice of the injunction, from continuing acts of infringement of the ’698 and ’701 patents;

J. Ordering that, in the event a permanent injunction preventing future acts of infringement is not granted, Plaintiffs be awarded a compulsory ongoing license fee;

K. Adjudging this an exceptional case and awarding to Plaintiffs their reasonable attorneys fees pursuant to 35 U.S.C. § 285; and

L. Awarding to Plaintiff StrikeForce such other and further relief as this Court may deem just and proper.

**JURY TRIAL DEMANDED**

Pursuant to Rule 38(b), Fed. R. Civ. P., Plaintiffs demand a trial by jury on all of the claims so triable.

Respectfully submitted,

Dated: March 14, 2017

By: /s/ *Dalila Argaez Wendlandt*

Dalila Argaez Wendlandt (BBO # 639280)
Samuel L. Brenner (BBO # 677812)
ROPES & GRAY LLP
Prudential Tower
800 Boylston Street
Boston, MA 02199-3600
*Dalila.Wendlandt@ropesgray.com*
*Samuel.Brenner@ropesgray.com*
Tel.: (617) 951-7000

Richard T. McCaulley, Jr. (*pro hac vice pending*)
ROPES & GRAY LLP
191 North Wacker Drive
32nd Floor
Chicago, IL 60606
*Richard.McCaulley@ropesgray.com*
Tel.: (312) 845-1200

Steven Pepe (*pro hac vice pending*)
Kevin J. Post (*pro hac vice pending*)
Josef B. Schenker (*pro hac vice pending*)
ROPES & GRAY LLP
1211 Avenue of the Americas
New York, NY 10036-8704
*Steven.Pepe@ropesgray.com*
*Kevin.Post@ropesgray.com*
*Josef.Schenker@ropesgray.com*
Tel.: (212) 596-9000

*Attorneys for Plaintiff StrikeForce Technologies, Inc.*