FOR PUBLICATION

UNITED STATES COURT OF APPEALS
FOR THE NINTH CIRCUIT

IN RE: NVIDIA CORPORATION SECURITIES LITIGATION, ROBERTO COHEN; NEW JERSEY CARPENTERS PENSION AND ANNUITY FUNDS, on behalf of themselves and all others similarly situated, *Plaintiffs-Appellants*, v. NVIDIA CORP.; JEN-HSUN HUNAG; MARVIN D. BURKETT, *Defendants-Appellees*.	No. 11-17708 D.C. No. 3:08-cv-04260-RS OPINION

Appeal from the United States District Court
for the Northern District of California
Richard Seeborg, District Judge, Presiding

Argued and Submitted
January 14, 2014—San Francisco, California

Filed October 2, 2014

Before: Richard C. Tallman and Sandra S. Ikuta, Circuit Judges, and Beverly Reid O'Connell, District Judge.[*]

Opinion by Judge O'Connell

SUMMARY[**]

Securities Fraud

The panel affirmed the district court's dismissal of a securities fraud action against NVIDIA Corp., a publicly traded semiconductor company, and other defendants under §§ 10(b) and 20(a) of the Securities Exchange Act of 1934 and Securities Exchange Commission Rule 10b-5.

The amended complaint alleged that NVIDIA should have informed investors of product defects earlier and that absent such a disclosure, the company's intervening statements regarding its financial condition were misleading to investors.

The panel held that the plaintiffs failed adequately to allege scienter by stating with particularity facts giving rise to a strong inference that the defendants acted with the required state of mind, as required by the Private Securities Litigation Reform Act, because they intentionally misled

[*] The Honorable Beverly Reid O'Connell, United States District Judge for the Central District of California, sitting by designation.

[**] This summary constitutes no part of the opinion of the court. It has been prepared by court staff for the convenience of the reader.

investors, or were at least deliberately reckless. Agreeing with the Third Circuit, the panel held that the district court did not err by failing to consider plaintiffs' allegations of scienter in the context of Item 303 of Regulation S-K, C.F.R. § 229.303, because Item 303's disclosure duty is not actionable under § 10(b) and Rule 10b-5. The panel held that none of the plaintiffs' allegations of scienter created a strong inference of scienter individually and that, together, they did not give rise to a strong inference of scienter holistically. The panel concluded that neither the corporate scienter doctrine nor the core operations doctrine supported a strong inference of scienter.

COUNSEL

David Brower (argued), Brower Piven, New York, New York, for Plaintiffs-Appellants.

James Kramer (argued) and Michael Torpey, Orrick, Herrington & Sutcliffe, LLP, San Francisco, California, for Defendants-Appellees.

OPINION

O'CONNELL, District Judge:

This case involves allegations of securities fraud. Defendant NVIDIA Corporation is a publicly traded semiconductor company. In the spring of 2008, it disclosed to investors information about defects in two of its products. A little over one month later, it further disclosed that it would be taking a $150–$200 million charge to cover costs arising

from those product defects. As a result, NVIDIA's share price dropped 31% and its market capitalization contracted by $3 billion. According to Plaintiffs, who had purchased NVIDIA's stock in the preceding eight months, the company knew it would be liable for the defective products long before its 2008 disclosures. They claim that NVIDIA should have informed investors about the defects as early as November 2007. They further contend that, absent a disclosure about the product defects, NVIDIA's intervening statements regarding its financial condition were misleading to investors, and consequently in violation of Section 10(b) of the Securities Exchange Act of 1934 and corresponding Securities Exchange Commission ("SEC") Rule 10b-5.

The district court below dismissed Plaintiffs' amended complaint without further leave to amend, holding that it failed to adequately allege scienter, a necessary element for a claim under either Section 10(b) or Rule 10b-5. We have jurisdiction under 28 U.S.C. § 1291.

On appeal, Plaintiffs essentially raise three distinct arguments, all directed to the element of scienter. First, they argue that the disclosure duty under Item 303 of Regulation S–K, 17 C.F.R. § 229.303, is actionable under Section 10(b) and Rule 10b-5. A proper analysis, they contend, should ascertain whether Defendants acted with scienter in violating Item 303's disclosure duty. Second, Plaintiffs assert that the district court failed to consider their allegations holistically. They contend that, when considered holistically, their allegations give rise to a strong inference of scienter. Third, Plaintiffs argue that the district court erred in finding that neither the corporate scienter doctrine nor the core operations doctrine supports a strong inference of scienter.

For the reasons discussed below, we affirm.

I

A.

NVIDIA Corporation is a publicly traded semiconductor company founded in 1993 by Jen-Hsun Huang, its current CEO. Its core business involves the design and sale of two similar semiconductor chips. One is a graphics processing unit ("GPU"); the other is a media and communications processor ("MCP"). In essence, GPUs are designed to process the vast amount of data necessary to render images to a computer's visual display. MCPs are similar to GPUs in that they function as a GPU in addition to various other devices, such as a system memory interface, Ethernet communications controller, and audio signal processor. Original equipment manufacturers ("OEMs"), such as Hewlett-Packard ("HP") and Dell Computer ("Dell"), purchase these chips and incorporate them into the motherboards of computers they assemble and sell to consumers.

In addition to their similar functions, GPUs and MCPs also share a similar configuration, which comprises two main parts: (1) a "die," or the silicon chip itself; and (2) a "substrate," or wafer, which is a green circuit board that ultimately connects the die to the motherboard's electrical components. To manufacture the GPUs and MCPs, the die is mounted onto the substrate. Importantly, the die electronically connects to the substrate through "bumps" of solder that relay electrical signals between the die and the rest of the computer. The bumps are attached to the substrate using a solder paste. Between the die and substrate is an

"underfill," which is a glue-like material that acts as an additional bonding agent to fortify the connection between the die and substrate. Together, the solder and underfill are referred to as the "Material Set."

Given the highly complex and technical nature of NVIDIA's GPU and MCP products, there is an inherent risk that some will fail. As a result, NVIDIA routinely includes in its SEC forms a statement explaining that "[its] products may contain defects or flaws," and warning investors that "[it] may be required to reimburse customers for costs to repair or replace the affected products." To cover costs relating to inevitable defects, NVIDIA automatically records a reduction to revenue as a cash reserve. As product return and replacement costs accrue, NVIDIA withdraws cash from that reserve.

B.

According to the complaint, in September 2006, NVIDIA began experiencing problems with certain of its GPU and MCP products, particularly with those products' Material Set. Plaintiffs allege that some of NVIDIA's chips experienced cracks in the solder bumps when subjected to excessive pressure during product testing. At that time, NVIDIA had been using a "eutectic" solder[1] (which has a relatively low lead content) together with eutectic solder paste. In an attempt to remedy the cracking problem, NVIDIA switched some of the solders used in the chips from a eutectic solder to

[1] Solder is a compound mixture of lead and tin. A particular mixture has a "eutectic" composition if it has a specific ratio of lead to tin. *See* Donald Askeland & Wendelin Wright, Essentials of Materials Science & Engineering 359–63 (2013).

a high-lead solder, which is more malleable and therefore less susceptible to cracking from the pressure in product testing. It continued to use the eutectic solder paste, however. According to Plaintiffs, varying thermal properties of the new, high-lead solder and the eutectic solder paste contributed to new problems with NVIDIA's chips. Specifically, because the two materials undergo thermal expansion at varying rates, the high-lead solder is susceptible to fatigue and cracking over time.

At some point, these new problems began manifesting in laptop computers incorporating NVIDIA's GPU and MCP products that were made using high-lead solder. After HP (and later Dell) began investigating these problems, it observed new cracking of the solder bumps connecting the die to the substrate (the "Material Set Problem"). At first, NVIDIA attributed the problem to "'customer-induced damage or [OEM] design issues.'" HP hypothesized that heat cycling was the root cause of the problem.[2] Specifically, HP believed that the solder bumps would weaken over time due to repeated thermal expansion caused by heat cycling.

To reduce the stress on the chips' solder bumps, and thus ameliorate the cracking problem, HP and Dell, with the help of NVIDIA, issued software updates ("BIOS"[3] updates) to their laptop computers. These BIOS updates altered a

[2] Heat cycling is a fluctuation of a computer's internal temperature. As the computer's internal components generate heat from usage, the internal temperature rises. When the computer's sensors detect a certain, preprogrammed temperature, the computer's program activates internal fans to lower the temperature.

[3] BIOS stands for Basic Input/Output System.

computer's fan algorithm, causing the internal cooling fans to run continuously, thereby eliminating heat cycling. Evidently, HP believed that by maintaining a fairly constant temperature, the solder bumps would not undergo thermal expansion as often and thus not be as susceptible to fatigue and failure.

Ultimately, after significant testing, HP concluded that the root cause of GPU and MCP failures in its computers was not caused by cracking due to heat cycling, but by cracking due to operation of the chips within a narrow temperature range. Apparently, the stress on the solder bumps caused by varying thermal properties of the high-lead solder and eutectic solder paste was especially acute in this temperature range. HP shared with NVIDIA its data demonstrating this problematic thermal profile, and, at some point, NVIDIA reproduced the data in its own laboratories.

In May and June 2008, NVIDIA issued to its OEM customers Product Change Notifications ("PCNs"), indicating that it would be transitioning back to eutectic solder.

C.

Between November 8, 2007, and May 22, 2008, NVIDIA filed several forms with the SEC, as required by law. According to Plaintiffs, those forms contained materially false and misleading statements, principally because they omitted information regarding the Material Set Problem.

For example, in the November 8, 2007 Form 8-K, Plaintiffs point to NVIDIA's claim that "[its] core businesses are continuing to grow as the GPU becomes increasingly central to today's computing experience." In NVIDIA's

February 13, 2008 Form 8-K, it highlights the assertion that "Fiscal 2008 was another outstanding and record year for us. Strong demand for GPUs in all market segments drove our growth." Plaintiffs argue that these statements and others made in NVIDIA's March 21, 2008, Form 10-K and May 8, 2008, Form 8-K are materially false and misleading because NVIDIA failed to disclose reported defects in its products as well.

D.

On May 22, 2008, NVIDIA disclosed in its quarterly report that it had received claims for reimbursement from one of its OEMs for incremental costs due to an "'alleged die/packaging material set defect.'" The report also indicated that the product was included in a significant number of the customer's computer products and had been shipped to other customers in significant quantities. NVIDIA explained that it was "evaluating the potential scope" of the problem "and cause of the alleged defect and the merits of the customer's claim." It further indicated that it was "unable to estimate the amount of costs that may be incurred" at that time.

Just over one month later, on July 2, 2008, NVIDIA filed an SEC Form 8-K indicating it would be taking "a $150 to $200 million charge to cover warranty, repair, return, replacement, and other costs 'arising from a weak die/packaging material set in certain versions of [its] previous MCP and GPU products used in notebook systems.'"[4] After

[4] Nevertheless, the form also stated that NVIDIA had "not been able to determine a root cause for these failures, [but] testing suggests a weak material set of die/package combination, system thermal management designs, and customer use patterns are contributing factors."

NVIDIA's July 2, 2008 disclosure, the market reacted accordingly, causing a 31% decline in NVIDIA's share price and a decrease of over $3 billion in its market capitalization.

E.

Plaintiffs invested in NVIDIA's stock between November 8, 2007 and July 2, 2008 (the "class period"). They allege that, beginning November 8, 2007, NVIDIA knew of the defect in the GPU and MCP Material Set, this knowledge was material to investors, and failure to disclose it made other statements in NVIDIA's SEC filings misleading.

Believing that Defendants violated federal securities laws, Plaintiffs filed three separate lawsuits, which the district court consolidated into a single action. In the consolidated complaint, Plaintiffs allege three distinct but related counts. In the first and second counts, they allege that NVIDIA and Huang, respectively, are liable for violations of both Section 10(b) of the Securities Exchange Act of 1934 and corresponding SEC Rule 10b-5. In the third count, they aver that Huang is further liable for violations of Section 20(a) of the Securities Exchange Act of 1934.

Upon Defendants' motion, the district court dismissed Plaintiffs' first consolidated class action complaint with leave to amend. Plaintiffs then filed a second consolidated class action complaint. Upon a second motion by Defendants, the district court dismissed that complaint without leave to amend. In its order of dismissal, the district court specifically held that Plaintiffs failed to sufficiently plead scienter, an element required for each count.

II

We review dismissals under Federal Rule of Civil Procedure 12(b)(6) de novo. *In re Daou Sys., Inc.*, 411 F.3d 1006, 1013 (9th Cir. 2005). In doing so, we accept as true all factual allegations and determine whether they are sufficient to state a claim for relief; we do not, however, accept as true allegations that are conclusory. *Ashcroft v. Iqbal*, 556 U.S. 662, 678 (2009). Moreover, "[f]actual allegations must be enough to raise a right to relief above the speculative level." *Bell Atl. Corp. v. Twombly*, 550 U.S. 544, 555 (2007). There must be "more than a sheer possibility that a defendant has acted unlawfully." *Iqbal*, 556 U.S. at 678.

In reviewing the sufficiency of a complaint, we limit ourselves to the complaint itself and its attached exhibits, documents incorporated by reference, and matters properly subject to judicial notice. *Tellabs, Inc. v. Makor Issues & Rights, Ltd.*, 551 U.S. 308, 322–23 (2007); *Lee v. City of Los Angeles*, 250 F.3d 668, 688 (9th Cir. 2001).

III

A.

1.

Section 10(b) of the Securities Exchange Act of 1934 declares it unlawful to "use or employ, in connection with the purchase or sale of any security . . . , any manipulative or deceptive device or contrivance in contravention of such rules and regulations as the [SEC] may prescribe as necessary." 15 U.S.C. § 78j(b). As the Supreme Court has indicated, there is an "implied [] private cause of action" in

Section 10(b). *Matrixx Initiatives, Inc. v. Siracusano*, 131 S. Ct. 1309, 1317 (2011). Additionally, "SEC Rule 10b-5 implements [Section 10(b)] by making it unlawful to . . . 'make any untrue statement of a material fact or to omit to state a material fact necessary in order to make the statements made . . . not misleading.'" *Id.* (quoting 17 C.F.R. § 240.10b-5). Thus, to prevail on a claim for violations of either Section 10(b) or Rule 10b-5, a plaintiff must prove six elements: "(1) a material misrepresentation or omission by the defendant; (2) scienter; (3) a connection between the misrepresentation or omission and the purchase or sale of a security; (4) reliance upon the misrepresentation or omission; (5) economic loss; and (6) loss causation." *Stoneridge Inv. Partners, LLC v. Scientific-Atlanta, Inc.*, 552 U.S. 148, 157 (2008).

Section 20(a) of the Securities Exchange Act of 1934 provides for liability of a "controlling person." 15 U.S.C. § 78t(a). To establish a cause of action under this provision, a plaintiff must first prove a primary violation of underlying federal securities laws, such as Section 10(b) or Rule 10b-5, and then show that the defendant exercised actual power over the primary violator. *Howard v. Everex Sys., Inc.*, 228 F.3d 1057, 1065 (9th Cir. 2000). Accordingly, our analysis focuses on Plaintiffs' allegations under Section 10(b) and Rule 10b-5.

2.

When alleging violations of federal securities laws, a plaintiff must satisfy the pleading requirements pronounced in the Private Securities Litigation Reform Act of 1995 ("PSLRA"). *Zucco Partners, LLC v. Digimarc Corp.*, 552 F.3d 981, 990–91 (9th Cir. 2009). In passing this act,

Congress "significantly altered pleading requirements in securities fraud cases [by] . . . requir[ing] that a complaint plead with particularity both falsity and scienter." *Id.* at 990 (internal citations and quotation marks omitted). More precisely, now a complaint must "state with particularity facts giving rise to a strong inference that the defendant acted with the required state of mind." 15 U.S.C. § 78u-4(b)(2)(A).

To assist courts in determining whether a plaintiff has satisfied this heightened pleading standard, the Supreme Court has provided three points of instruction: (1) "courts must, as with any [12(b)(6)] motion to dismiss . . . , accept all factual allegations in the complaint as true"; (2) "courts must consider the complaint in its entirety, as well as other sources courts ordinarily examine when ruling on Rule 12(b)(6) motions to dismiss"; and (3) "in determining whether the pleaded facts give rise to a 'strong' inference of scienter, the court must take into account plausible opposing inferences." *Tellabs*, 551 U.S. at 322–23. In discussing the third point, the Court explained that, although "[t]he inference [of scienter] need not be irrefutable, . . . or even the 'most plausible of competing inferences,'" it "must be more than merely 'reasonable' or 'permissible'—it must be cogent and compelling, thus strong in light of other [countervailing] explanations." *Id.* at 324 (citations omitted). Ultimately, the Court held that "[a] complaint will survive . . . only if a reasonable person would deem the inference of scienter cogent and at least as compelling as any opposing inference one could draw from the facts alleged." *Id.*

3.

Having outlined the lens through which we must consider Plaintiffs' allegations of scienter, we now turn to the

definition of scienter itself. In *Ernst & Ernst v. Hochfelder*, the Supreme Court explained in a footnote that "the term 'scienter' refers to a mental state embracing intent to deceive, manipulate, or defraud." 425 U.S. 185, 193 n.12 (1976). The Court recognized that some Courts of Appeals include within their definition of scienter a form of recklessness, but it did not address whether those courts are correct in doing so. *Id.* As recently as in its decision in *Matrixx Initiatives*, the Court stated that it "ha[s] not [yet] decided whether recklessness suffices to fulfill the scienter requirement." 131 S. Ct. at 1323.

In this circuit, we have "held that recklessness may satisfy the element of scienter." *Hollinger v. Titan Capital Corp.*, 914 F.2d 1564, 1568–69 (9th Cir. 1990) (en banc). We defined recklessness "'as a highly unreasonable omission, involving . . . an extreme departure from the standards of ordinary care, and which presents a danger of misleading buyers or sellers that is either known to the defendant or is so obvious that the actor must have been aware of it.'" *Id.* at 1569 (quoting *Sundstrand Corp. v. Sun Chem. Corp.*, 553 F.2d 1033, 1044–45 (7th Cir. 1977)).[5] We added that "the danger of misleading buyers must be actually known or so obvious that any reasonable man would be legally bound as knowing." *Id.* at 1569–70 (internal quotation marks omitted). In *In re Silicon Graphics Inc. Securities Litigation*, we opined that the wording of our previous decisions discussing recklessness—including our decision in *Hollinger*—indicates that the standard for recklessness is actually much closer to one of intent: "These cases indicate that recklessness only satisfies scienter under § 10(b) to the

[5] In *Hollinger*, we expressly "adopt[ed] the standard of recklessness articulated by the Seventh Circuit in *Sundstrand Corp.*" 914 F.2d at 1569.

extent that it reflects some degree of intentional or conscious misconduct." 183 F.3d 970, 977 (9th Cir. 1999). Accordingly, we explained that scienter requires "a strong inference of, at a minimum, '*deliberate* recklessness.'" *Id.* (emphasis added).[6] Since then, we have consistently applied the "deliberate recklessness" terminology and standard articulated in *Silicon Graphics*. *See, e.g.*, *In re VeriFone Holdings, Inc. Sec. Litig.*, 704 F.3d 694, 702 (9th Cir. 2012); *Zucco Partners*, 552 F.3d at 991; *In re Daou Sys., Inc.*, 411 F.3d at 1022.[7]

We now address Plaintiffs' arguments on appeal.

---

[6] It appears that the term "deliberate recklessness" was coined by the district court that we affirmed in *Silicon Graphics*. Our opinion in that case was the first time we ever used the term. The only other appellate court to have used the term previously did so less than one month before we did, and it cited to the district court's decision that we affirmed, *In re Silicon Graphics, Inc. Securities Litigation*, 970 F. Supp. 746 (N.D. Cal. 1997). *See In re Advanta Corp. Sec. Litig.*, 180 F.3d 525, 530 (3d Cir. 1999).

[7] In their reply brief, Plaintiffs cite *In re Oracle Corp. Securities Litigation*, 627 F.3d 376, 390 (9th Cir. 2010), and argue that the standard for deliberate recklessness does not include an element of intent or conscious misconduct. *Oracle*, however, concerned the scienter standard for summary judgment, and we had previously held that "[b]ecause the PSLRA did not alter the substantive requirements for scienter under § 10(b), [] the standard [for establishing scienter] on summary judgment or JMOL remains unaltered by *In Re Silicon Graphics*." *Howard*, 228 F.3d at 1064. Unlike *Oracle* or *Howard*, this case comes to us following a motion to dismiss. We therefore apply the standard set forth in *In re Silicon Graphics*.

B.

Plaintiffs first argue that the district court erred by failing to consider their allegations of scienter in the context of Item 303 of Regulation S–K, 17 C.F.R. § 229.303.[8] They correctly assert that Item 303 requires disclosure of certain information. But then they contend that, if the information is material, failure to disclose it constitutes a material omission for purposes of Section 10(b) and Rule 10b-5. Ultimately, Plaintiffs argue that the district court's analysis should have focused on whether NVIDIA acted with scienter in failing to make the Item 303 disclosure.

We have never directly decided whether Item 303's disclosure duty is actionable under Section 10(b) and Rule 10b-5. We now hold that it is not.

To prevail on a claim under Section 10(b) or Rule 10b-5, a plaintiff must demonstrate that the defendant made a misleading statement or omission of material fact. *Matrixx Initiatives*, 131 S. Ct. at 1318. Thus, a statement might be misleading because it affirmatively misstates information. Or a statement might be misleading because it is made outside

---

[8] Item 303, 17 C.F.R. § 229.303(a)(3)(ii), requires registrants to:

> Describe any known trends or uncertainties that have had or that the registrant reasonably expects will have a material favorable or unfavorable impact on net sales or revenues or income from continuing operations. If the registrant knows of events that will cause a material change in the relationship between costs and revenues (such as known future increases in costs of labor or materials or price increases or inventory adjustments), the change in the relationship shall be disclosed.

the context of other material information. Yet neither Section 10(b) nor Rule 10b-5 "create[s] an affirmative duty to disclose any and all material information. Disclosure is required under these provisions only when necessary 'to make . . . statements made, in the [sic] light of the circumstances under which they were made, not misleading.'" *Id.* at 1321–22 (alteration in original) (quoting 17 C.F.R. § 240.10b-5). In *Basic Inc. v. Levinson*, the Supreme Court noted that "[s]ilence, absent a duty to disclose, is not misleading under Rule 10b-5." 485 U.S. 224, 239 n.17 (1988). The Court did not explain what would give rise to a duty to disclose, but it is this language in *Basic* that Plaintiffs cite in support of their argument. They assert that Item 303 creates "a duty to disclose," and failure to disclose it is therefore misleading for purposes of Section 10(b) and Rule 10b-5.

We have confronted a similar argument before. *See In re VeriFone Sec. Litig.*, 11 F.3d 865, 870 (9th Cir. 1993); *In re Lyondell Petrochemical Co. Sec. Litig.*, 984 F.2d 1050, 1053 (9th Cir. 1993); *In re Convergent Techs. Sec. Litig.*, 948 F.2d 507, 516 (9th Cir. 1991). In each instance, we strongly suggested that a violation of Item 303 cannot be used to show a violation of Section 10(b) and Rule 10b-5. We noted that, "[w]hile § 229.303(a)(3)(ii) provides that 'known trends or uncertainties' be disclosed in certain SEC filings," Instruction 7 to Item 303(a) "states that forward-looking information need not be disclosed." *In re VeriFone*, 11 F.3d at 870. Without further discussion, we rejected the plaintiffs' argument.[9]

[9] Citing *In re VeriFone*, we recently noted that failure to comply with Regulation S–K is insufficient for a claim under Rule 10b-5. *Police Ret.*

In *Oran v. Stafford*, the Third Circuit decided this issue more directly. 226 F.3d 275, 287–88 (3d Cir. 2000). We are persuaded by its reasoning. There, the court explained that Item 303's disclosure requirement "varies considerably from the general test for securities fraud materiality set out by the Supreme Court in *Basic Inc. v. Levinson*." *Id.* at 288. In relevant part, Item 303 requires corporate management to "[d]escribe [in 10-K and 10-Q forms] any known trends or uncertainties that have had or that the registrant reasonably expects will have a material favorable or unfavorable impact on net sales or revenues or income from continuing operations." 17 C.F.R. § 229.303(a)(3)(ii). The SEC shed further light on this requirement in an interpretive release:

> Where a trend, demand, commitment, event or uncertainty is known, management must make two assessments:
>
> (1) Is the known trend, demand, commitment, event or uncertainty likely to come to fruition? If management determines that it is not reasonably likely to occur, no disclosure is required.
>
> (2) If management cannot make that determination, it must evaluate objectively the consequences of the known trend, demand, commitment, event or uncertainty, on the assumption that it will come to fruition. Disclosure is then required unless management determines that a material effect

---

Sys. of St. Louis v. Intuitive Surgical, Inc., 759 F.3d 1051, 1061 n.4 (9th Cir. 2014).

> on the registrant's financial condition or results of operations is not reasonably likely to occur.

Management's Discussion and Analysis of Financial Condition and Results of Operations, Exchange Act Release No. 34-26831, 54 Fed. Reg. 22427, 22430 (May 24, 1989). On the other hand, in *Basic*, the Supreme Court stated that materiality of forward-looking information depends "upon a balancing of both the indicated probability that the event will occur and the anticipated magnitude of the event in light of the totality of the company activity." 485 U.S. at 238 (internal quotation marks omitted).

As the court in *Oran* also determined, these two standards differ considerably. 226 F.3d at 288. Management's duty to disclose under Item 303 is much broader than what is required under the standard pronounced in *Basic*. The SEC intimated this point as well: "[Item 303] mandates disclosure of specified forward-looking information, and specifies its own standard for disclosure—*i.e.*, reasonably likely to have a material effect. . . . The probability/magnitude test for materiality approved by the Supreme Court in *Basic, Inc., v. Levinson*, 108 S. Ct. 978 (1988), is inapposite to Item 303 disclosure." Exchange Act Release No. 34-26831, 54 Fed. Reg. at 22430 n.27. The SEC's effort to distinguish *Basic*'s materiality test from Item 303's disclosure requirement provides further support for the position that Item 303 requires more than *Basic*—what must be disclosed under Item 303 is not necessarily required under the standard in *Basic*. Therefore, "[b]ecause the materiality standards for Rule 10b-5 and [Item 303] differ significantly, the 'demonstration of a violation of the disclosure requirements of Item 303 does not lead inevitably to the conclusion that such disclosure would

be required under Rule 10b-5. Such a duty to disclose must be separately shown.'" *Oran*, 226 F.3d at 288.

Plaintiffs' reliance on *Litwin v. Blackstone Group, L.P.*, 634 F.3d 706 (2d Cir. 2011), and *Panther Partners Inc. v. Ikanos Communications, Inc.*, 681 F.3d 114 (2d Cir. 2012), is unavailing. Those cases involved alleged violations of Sections 11 and 12(a)(2) of the Securities Act of 1933, not Section 10(b) or Rule 10b-5. And, as we acknowledged in *Steckman v. Hart Brewing, Inc.*, "Section 10(b) of the Exchange Act . . . differs significantly from Sections 11 and 12(a)(2) of the Securities Act." 143 F.3d 1293, 1296 (9th Cir. 1998). Liability under Sections 11 and 12(a)(2) of the Securities Act may arise from "omitt[ing] to state a material fact required to be stated." *See* 15 U.S.C. §§ 77k(a), 77l(b). To put it differently, liability arises from "an omission in contravention of an affirmative legal disclosure obligation." *Panther Partners*, 681 F.3d at 120. There is no such requirement under Section 10(b) or Rule 10b-5. As discussed above, for purposes of Section 10(b) and Rule 10b-5, material information need not be disclosed unless omission of that information would cause other information that is disclosed to be misleading. *Matrixx Initiatives*, 131 S. Ct. at 1321. Furthermore, as noted in *Panther Partners*, scienter is not an element of either a Section 11 or Section 12(a)(2) claim. 681 F.3d at 120. Such claims are not subject to the PSLRA's heightened pleading standards unless based on allegations of fraud. *Id.* Accordingly, neither *Panther Partners* nor *Litwin* affects our analysis here.

Also unavailing is Plaintiffs' reliance on *Simon v. American Power Conversion Corp.*, 945 F. Supp. 416 (D.R.I. 1996). In that case, then-Chief Judge Laguex opined that Item 303 imposes "an affirmative duty to disclose," and

found that the defendant's failure to disclose in that case was actionable. *Simon*, 945 F. Supp. at 431. Subsequently, however, Judge Laguex clarified his opinion: "As this Court noted in *Simon*, the disclosure rules are probative of what defendants are otherwise obliged to disclose but do not, themselves, provide an independent duty of disclosure." *Kafenbaum v. GTECH Holdings Corp.*, 217 F. Supp. 2d 238, 249 (D.R.I. 2002). He went on to say that "plaintiffs may not rely solely upon Item 303 to prove that defendants failed to disclose material information as a matter of law [in violation of Rule 10b-5]." *Id.* at 250.

In sum, we hold that Item 303 does not create a duty to disclose for purposes of Section 10(b) and Rule 10b-5. Such a duty to disclose must be separately shown according to the principles set forth by the Supreme Court in *Basic* and *Matrixx Initiatives*.

C.

Next, Plaintiffs contend that the district court erred by not considering their allegations of scienter holistically.

In *Tellabs*, the Supreme Court explained that, when assessing allegations of scienter, a "court's job is not to scrutinize each allegation in isolation but to assess all the allegations holistically . . . . [T]he reviewing court must ask: When the allegations are accepted as true and taken collectively, would a reasonable person deem the inference of scienter at least as strong as any opposing inference?" 551 U.S. at 326 (citations omitted). We apply this same standard but in a dual inquiry. First, we determine whether any of the plaintiff's allegations, standing alone, is sufficient to create a strong inference of scienter. *Zucco Partners*,

552 F.3d at 992. If none is sufficient alone, we then consider the allegations holistically to determine whether they create a strong inference of scienter taken together. *Id.*

We have reviewed Plaintiffs' allegations in their entirety. We find that none creates a strong inference of scienter individually. And, together, they do not give rise to a strong inference of scienter holistically. The most compelling inference that we can reasonably draw is that NVIDIA was first investigating the root cause, and then the scope, of the Material Set Problem; once it determined that its liability would exceed its normal reserves, NVIDIA disclosed the problem to investors. Any inference of scienter requires more than this. Thus, while the complaint may plausibly allege knowledge of the Material Set Problem, it does not plausibly allege that NVIDIA and Huang intentionally misled investors, or acted with deliberate recklessness, by not disclosing the problem sooner. We discuss our reasoning below.

Plaintiffs contend that NVIDIA acted with scienter in withholding from investors certain information regarding the Material Set Problem. They allege that, between November 2007 and July 2008, NVIDIA made various statements in its SEC forms regarding its financial performance and the quality of its products. Plaintiffs argue that those statements were materially false and misleading because NVIDIA did not also disclose that certain of its products were failing at an abnormal rate and that NVIDIA ultimately would be financially responsible for replacement costs. According to Plaintiffs, NVIDIA first determined that it would be financially liable for the chip failures by the middle of 2007; nevertheless, it did not disclose this to investors until July 2008. From these facts, Plaintiffs infer that NVIDIA intentionally misled investors by waiting to disclose its

liability for almost an entire year, until it had prepared replacement products.

In evaluating Plaintiffs' inference of scienter, we bear in mind that NVIDIA includes in its SEC forms a statement explaining that "[its] products may contain defects or flaws" and warning investors that "[it] may be required to reimburse customers for costs to repair or replace the affected products." Moreover, we are mindful that, because product defects are so common, NVIDIA automatically records a reduction to revenue as a cash reserve to cover costs relating to the inevitable product failures. Bearing these facts in mind, we must determine whether Plaintiffs' allegations create a strong inference of scienter that Huang and NVIDIA intentionally misled investors, or were at least deliberately reckless, by not disclosing NVIDIA's liability for chip failures prior to July 2008.

1.

Plaintiffs allege that NVIDIA first became aware of the Material Set Problem sometime in 2006, and then determined the root cause of the problem—and therefore that it would be financially responsible for it—by the middle of 2007. Then they contend that the one-year delay between NVIDIA's root cause determination in mid-2007 and its disclosure of the problem in 2008 was motivated by an intent to mislead investors until it had prepared replacement products. Nevertheless, Plaintiffs' allegations that NVIDIA first determined the root cause of its chip failures by the middle of 2007 are implausible. In so alleging, Plaintiffs rely most directly on the accounts of Confidential Witness No. 1 ("CW1"), Confidential Witness No. 7 ("CW7"), and articles written by Charlie Demerjian.

According to CW1, "'communications between HP and NVIDIA began in 2006, with HP asking questions, and asking NVIDIA to conduct [a] failure analysis.'" When NVIDIA initially resisted, HP began to engage it at a higher, executive, level. By early 2007, HP had determined that NVIDIA's chips sustained physical damage through normal use, and therefore making NVIDIA responsible. HP developed "'overwhelming data demonstrating root cause'" and "identified the thermal profile" that would cause NVIDIA's chips to experience cracking at the solder bumps. CW1 asserts that HP shared the data and thermal profile with NVIDIA sometime in early 2007 and NVIDIA reproduced it by the middle of 2007.

The timing of CW1's account conflicts with the account of Richard Hunt Hodge, HP's Director of Engineering and Quality for the Notebook Division.[10] According to Hodge, HP itself did not determine the thermal profile that would significantly increase the probability of chip failures until the middle of 2008: "Ultimately, by mid-2008, HP determined that operation of the NVIDIA part through a narrow temperature range . . . was the cause of" chip failures due to solder bump cracking. If HP did not determine the problematic thermal profile until the middle of 2008, any inference of scienter is significantly reduced, as NVIDIA disclosed the information in July 2008.

[10] Because Plaintiffs incorporate by reference Mr. Hunt's declaration, relying on portions of it in their complaint, we may properly consider the declaration in its entirety. *See Tellabs*, 551 U.S. at 322; *see also City of Roseville Emps.' Ret. Sys. v. Sterling Fin. Corp.*, 963 F. Supp. 2d 1092, 1107 (E.D. Wash. 2013) ("Once a document is deemed incorporated by reference, the entire document is assumed to be true for purposes of a motion to dismiss, and both parties—and the Court—are free to refer to any of its contents.").

The notion that HP had determined the problematic thermal profile in early 2007 is implausible when considered together with Plaintiffs' other allegations. Plaintiffs allege that HP and Dell, with the help of NVIDIA, issued BIOS updates in November 2007[11] and February 2008, respectively. Those BIOS updates altered a computer's fan algorithm so that its internal cooling fans would run continuously, thereby eliminating heat cycling and maintaining a fairly constant temperature inside the computer. Hodge explains in his declaration that the HP BIOS update "keeps [a GPU or MCP] outside of [the problematic] temperature range (usually around 50ºC at idle). Because it runs constantly, it obviates the thermal mini-cycle through the problematic narrow temperature range." If HP had determined the problematic thermal profile in early 2007, as Plaintiffs and CW1 allege, it is implausible that HP would have waited until November 2007 to issue a BIOS update that greatly reduces the probability of a chip failure due to solder bump cracking.[12] The implausibility of the timing in CW1's account of events further detracts from any inference of scienter.

---

[11] According to Hodge, HP's BIOS update "was released on or about on December 3, 2007."

[12] Indeed, Hodge's timing of events is much more plausible than CW1's. He explains that HP hypothesized in November 2007 "that repeated temperature mini-cycling could result in solder cracks . . . and believed eliminating that temperature cycling would correct the issue." Accordingly, HP developed the BIOS updates to maintain a constant temperature within its computers. Nevertheless, as HP continued testing, it discovered that temperature cycling itself would not induce chip failures, but operating the NVIDIA chip within the specific problematic thermal profile would induce chip failures. Fortuitously, the BIOS update maintained NVIDIA's chips at a constant temperature outside of the problematic temperature range.

Plaintiffs' reliance on Charlie Demerjian and CW7 to corroborate CW1's timing of events does not restore plausibility to their allegations. Demerjian is "a reporter with 25 years experience working with computers." He "covered NVIDIA's chip defects and spoke to dozens of people about the problems." Clearly, Demerjian's information is secondhand. In any event, Demerjian merely indicates that "HP started a 'root cause analysis' and by summer 2007, HP employees knew that NVIDIA's GPUs were having problems associated with heat cycling." This account does not indicate that HP had determined the root cause or problematic thermal profile by summer 2007. According to CW7, "Dell saw problems with NVIDIA GPUs in early 2007." CW7 indicated that NVIDIA "eventually admitted that it was their chip causing the problem, and that it was not a Dell issue." Nevertheless, CW7 does not allege when NVIDIA admitted responsibility for the problems. Thus, even if Dell had notified NVIDIA of problems in early 2007, CW7 provides no basis to infer that NVIDIA also knew it would be liable at that time.

Even accepting as true CW1's timing of events, the fact that NVIDIA had reproduced the problematic thermal profile by the middle of 2007—and thus had determined the root cause of the chip failures—does not create an inference of scienter. Plaintiffs assert that HP provided NVIDIA with what HP believed demonstrated root cause of, and NVIDIA's liability for, the chip failures. Their allegations do not provide any basis to infer what NVIDIA concluded from the profile or other data, nor do they plausibly suggest that NVIDIA must have determined it was at fault at that time. Furthermore, Plaintiffs never allege that Huang or anyone else at NVIDIA knew at that time (or any time prior to July 2008) that NVIDIA's liability would exceed its normal

reserve set aside for costs associated with product failures. Accordingly, these allegations do not give rise to a strong inference that Huang and NVIDIA acted with intent to mislead investors, or recklessly disregarded an obvious danger of misleading investors, by not disclosing information regarding the Material Set Problem prior to July 2008.

2.

After alleging that HP provided NVIDIA with all of its data demonstrating root cause and the problematic thermal profile, Plaintiffs assert that determining the cause of the problem should have been easy for NVIDIA. They rely on several sources to support this allegation.

CW1, Demerjian, and John Rigg, Plaintiffs' consultant in this case, assert that "failures of the GPU are easily identifiable." Confidential Witness No. 2 explains that it "takes about a month" to determine whether a GPU or MCP is generating more heat than specified. Hodge indicates that "it took HP less than two months to hypothesize that temperature cycling caused the problematic cracks in the solder bumps."

But even if GPU failures are easily identifiable, it does not necessarily follow that NVIDIA would be responsible for those failures or should have known that it would be responsible. As NVIDIA initially contended, the failures could have been caused by OEM design issues. And Plaintiffs' reliance on Hodge's declaration for the contention that NVIDIA should have easily determined that it was liable for the chip failures is misplaced. Plaintiffs ignore the timing of Hodge's account—HP did not hypothesize temperature mini-cycling as the root cause until November 2007. Then,

HP did not begin to test its hypothesis until January 2008. After 13 weeks of testing, HP determined that temperature mini-cycling was not the root cause, as its testing did not induce a single chip failure. It was not until sometime around the middle of 2008 that HP ultimately discovered the specific cause of chip failures: operation within the problematic thermal profile.

Plaintiffs also rely on two articles for the proposition that NVIDIA must have known that it was going to be liable sooner than it admitted. Both articles were published after NVIDIA's July 2008 disclosure. One article provides AMD's (one of NVIDIA's competitors) opinion on NVIDIA's chip failures. "According to the article, 'AMD thinks [high-lead bumps are] more prone to fatigue and need "comprehensive reliability engineering to be used successfully."'" AMD also notes that a high-lead solder and eutectic solder paste have varying thermal expansion coefficients, which places significant stress on the solder bumps. The other article discusses a research report written by K.N. Tu, a professor affiliated with the Department of Materials Science and Engineering at the University of California, Los Angeles. In essence, the report discusses the same issues discussed by AMD.

These articles do not contribute to an inference of scienter. They were written in hindsight and do not reflect Huang or NVIDIA's knowledge prior to July 2008. Simply because scientists were able to explain in retrospect the science behind NVIDIA's chip failures, it does not mean that NVIDIA knew or should have known it would be liable for those failures during the class period or that its liability would exceed its normal reserve.

Plaintiffs also point to an email authored by HP's Richard Hodge in May 2007, wherein Hodge indicated that NVIDIA had moved away from eutectic solder in its chips. From this email, Plaintiffs conclude that there are "known industry concerns with . . . the use of high-lead solder." They also conclude, "Defendants knew and/or deliberately disregarded that their GPU and MCP problems likely stemmed from this hasty, under-tested manufacturing change initiated in 2006." Nevertheless, there is no basis for this conclusion. Certainly, Hodge's email suggests that he had some concern about using noneutectic solder. But there is nothing more to indicate an industry-wide concern with noneutectic solder, nor is there anything to suggest that NVIDIA should have known that its use of noneutectic solder was the root cause of its chip failures. Accordingly, this allegation does not appreciably add to any inference of scienter.

3.

Next, Plaintiffs contend that NVIDIA delayed disclosure of its chip failures until it had prepared replacement chips. They support this contention with very few factual allegations, however.

Plaintiffs rely on statements made by CW1. After HP provided NVIDIA with data that HP believed demonstrated the root cause of the chip failures and the problematic thermal profile that would cause those failures, "'NVIDIA confirmed to HP that it was able to reproduce the problem.'" Yet, according to CW1, NVIDIA "'never admitted to getting to root cause, and they peddled the same story for as long as possible, that they were still investigating.'" CW1 also alleges that "NVIDIA would do the 'PhD runaway' to appear cooperative while trying to slow HP down." In essence, CW1

asserts that NVIDIA's Ph.D. employees would ask HP to conduct additional tests merely to buy more time.

As we discussed above, the timing of CW1's account is implausible, especially in light of Hodge's more-detailed declaration. CW1 provides no specific examples of when NVIDIA attempted to slow down HP by having it conduct meaningless tests or experiments, nor does CW1 explain why those tests and experiments were meaningless. From CW1's assertions alone, a reasonable factfinder could not infer that NVIDIA was conducting needless testing or attempting to delay disclosure of its product defects. As a matter of law, CW1's account to this end does not add to an inference of scienter.

Plaintiffs also rely on a statement made by NVIDIA's Vice President of Investor Relations, Michael Hara. In September 2008, after NVIDIA's disclosure, Hara explained to investors that the failing chips were past or near the end of their useful life and that NVIDIA was "'not even shipping these parts anymore.'" From this statement, Plaintiffs infer that "Defendants stalled the disclosure of the material, adverse facts for several months, if not a full year, until the failing products were at the end of their life-cycle and the Company had new products to market."

We agree that the coincidence of NVIDIA's disclosure with the apparent end-of-life of its failing chips could, under some circumstances, arouse suspicion. But this statement alone does not create an inference that NVIDIA strategically delayed disclosure of its chip failures until those chips were past their useful life.

Finally, Plaintiffs rely on the fact that NVIDIA participated in preparation of BIOS updates and issued PCNs. As we discussed above, the uncontested evidence shows that in November 2007, NVIDIA helped HP (and later Dell) issue BIOS software updates that altered a computer's fan algorithm. In May and June 2008, NVIDIA issued PCNs that indicated it would be changing back to a eutectic solder in its GPUs and MCPs. Plaintiffs allege that significant engineering is required to transition from one Material Set to another. From these facts, Plaintiffs conclude that NVIDIA must have known it was liable for the product defects long before its disclosure. But these facts do not mandate such a conclusion. The BIOS updates were intended to ease stress caused by heat cycling, which, as NVIDIA first contended, could have been caused by OEM design issues. Even if NVIDIA decided to transition back to eutectic solder long before it issued PCNs in May and June 2008, it does not necessarily mean that NVIDIA knew it was responsible for the failures. A more plausible inference is that NVIDIA believed that high-lead solder was a contributing factor and switched back to eutectic solder to eliminate it.

4.

After alleging that NVIDIA delayed disclosure until it had prepared replacement chips, Plaintiffs attempt to buttress that allegation by contending that NVIDIA has a history of delaying disclosure of known problems. Nevertheless, they rest their contention on the accounts of several confidential witnesses whose experiences do not contribute to an inference of scienter. Their accounts are unspecific and speculative. More problematic, some witnesses never worked for NVIDIA. And those who did either stopped working there long before the Material Set Problem arose or worked in an

area unrelated to it, such as environmental engineering or "Staffing Systems and Compliance."

For example, Confidential Witness No. 11 ("CW11") worked for NVIDIA as a senior engineering manager between December 2002 and March 2006, months before the product failures arose. CW11's declaration maintains that NVIDIA is "arrogant, [and] think[s it] never do[es] wrong," and "operated with a 'failure to recognize real problems.'" Confidential Witness No. 12 ("CW12") was a sales director for one of NVIDIA's vendors. CW12 "stated that NVIDIA was notorious for blaming other entities for product related problems. . . . 'Some of the time they were right in [blaming others] and some of the time they were wrong, but their default was always to say, "This is not our problem. This is your problem."'"

Confidential Witness No. 13 ("CW13") worked at NVIDIA as an environmental compliance engineer. CW13 "stated that NVIDIA has a history of failing to take responsibility for Company problems." CW13 believes that NVIDIA "'had the following mentality: "Don't say anything to muck the waters."'" "[Confidential Witness No. 15 ("CW15")], a former NVIDIA Staffing Systems and Compliance Analyst, stated that s/he was told: 'I don't care what you do, just make us look good.'" CW15 provides no context, however, as to who made the statement or why the statement was made. Confidential Witness No. 16 ("CW16") worked for a website that sold NVIDIA products. CW16 stated, "'I've seen a lot of hostile actions from [NVIDIA] . . . 'NVIDIA tends to be a little "scrooge-ish" when it comes to scrapping their failure percentage rates. . . . They've had a lot of fiascos in the past with like the GeForce 2 Ultra, a lot of overheating issues.'"

These statements do not give rise to an inference of scienter individually. The testimony of Confidential Witness No. 14 ("CW14") provides the most probative evidence indicating that NVIDIA had a culture of failing to take responsibility for known problems. CW14 was a "Director of IC Quality and Reliability for NVIDIA." According to CW14, there was an instance where employees at NVIDIA knew of a design flaw in one of its products, but did not reveal it until after NVIDIA's customer had discovered and contained the problem. CW14's testimony is less significant, however, when considering that his/her period of employment was at most one year, from 2000 to 2001, long before the product defects giving rise to this lawsuit.

Accordingly, these allegations that NVIDIA has a history of delaying known problems do not give rise to a strong inference of scienter.

5.

As further evidence of scienter, Plaintiffs rely on the existence of other lawsuits filed against NVIDIA by its insurers. Apparently, after it disclosed to investors information regarding its defective products, NVIDIA submitted claims to its insurance companies to cover the losses sustained as a result. Foreseeably, the insurance companies did not want to pay NVIDIA's claims. Thus, they alleged that NVIDIA knew of the defective products before January 2008 and had failed to provide information that the insurers had requested. These allegations do not significantly add to an inference of scienter, as the insurers litigating claims would attempt to avoid liability.

Evidently, one of NVIDIA's insurers also alleged the existence of a class action lawsuit filed against HP in November 2007. The insurer argued that NVIDIA knew the lawsuit related to problems with NVIDIA's defective chips and that HP would seek indemnification from NVIDIA. Nevertheless, Plaintiffs never explain with any particularity when or how NVIDIA became aware that HP would seek indemnification from NVIDIA. Accordingly, the existence of this additional lawsuit does not add to an inference of scienter.

6.

Plaintiffs also contend that, when considered with all other allegations, the departure of some of NVIDIA's executives adds to the inference of scienter. We do not agree.

Plaintiffs allege that three individuals left NVIDIA after it disclosed the defective products. On May 27, 2008, NVIDIA's CFO, Marvin Burkett, announced his retirement. Significantly, Burkett continued as interim CFO until a replacement was hired, and in February 2009, he became a senior advisor to NVIDIA. In June 2008, NVIDIA's Senior Director and Head of Internal Audit left the company. Plaintiffs do not explain, however, how this executive played any role in allegedly delaying the disclosure of the defective products. In January 2009, NVIDIA replaced David Kirk, its Chief Scientist. Plaintiffs fail to provide any detail as to why Kirk was replaced; notably, Kirk continued to work with NVIDIA as a research fellow.

In short, Plaintiffs fail to provide any facts to connect these departures with the problems at issue in this lawsuit. More detrimental to their allegations, however, is that two of

the three individuals remained at NVIDIA in some type of advisory role. Therefore, the most reasonable inference is that these departures were benign.

7.

Plaintiffs argue that their allegations give rise to an inference of scienter under the corporate scienter doctrine. "'In most cases, the most straightforward way to raise [an inference of scienter] for a corporate defendant will be to plead it for an individual defendant.'" *Glazer Capital Mgmt., LP v. Magistri*, 549 F.3d 736, 743 (9th Cir. 2008) (quoting *Teamsters Local 445 Freight Div. Pension Fund v. Dynex Capital Inc.*, 531 F.3d 190, 195 (2d Cir. 2008)). Yet, the collective scienter (or corporate scienter) doctrine recognizes that it is possible to raise the inference of scienter without doing so for a specific individual. *Id.* In the Ninth Circuit, we "ha[ve] not previously adopted a theory of collective scienter." *Id.* at 744. Nevertheless, in *Glazer Capital*, we opined that the doctrine might be appropriate in some cases. *Id.* "For instance, as outlined in the hypothetical posed [by the Seventh Circuit], there could be circumstances in which a company's public statements were so important and so dramatically false that they would create a strong inference that at least *some* corporate officials knew of the falsity upon publication." *Id.* (citing *Makor Issues & Rights, Ltd. v. Tellabs Inc.*, 513 F.3d 702, 710 (7th Cir. 2008)).

We do not believe the facts alleged in this case would give rise to an inference of scienter under the collective scienter doctrine. Here, Plaintiffs contend that statements made by NVIDIA in its SEC filings were misleading because NVIDIA did not also disclose information regarding the Material Set Problem. Those statements were not "so

dramatically false"—as in the example posed by the Seventh Circuit in *Makor*[13]—to create an inference of scienter that at least some corporate officials knew of the falsity upon publication.

Plaintiffs also contend that their complaint raises a strong inference of scienter under the core operations doctrine. Under this doctrine, the PSLRA's pleading requirements may be satisfied, in certain circumstances, by "a scienter theory that infers that facts critical to a business's 'core operations' or an important transaction are known to a company's key officers." *S. Ferry LP, No. 2 v. Killinger*, 542 F.3d 776, 783–84 (9th Cir. 2008). In *South Ferry*, we explained that, in light of the Supreme Court's decision in *Tellabs*, the core operations inference may be considered when weighing a complaint's allegations of scienter holistically. *Id.* at 784–85. Nevertheless, we cautioned that, "'absent some additional allegation of specific information conveyed to management and related to the fraud' or other allegations supporting scienter," the core operations inference will generally fall short of a strong inference of scienter. *Id.* We did, however,

---

[13] In *Makor*, the Seventh Circuit illustrated its point that

> it is possible to draw a strong inference of corporate scienter without being able to name the individuals who concocted and disseminated the fraud. Suppose General Motors announced that it had sold one million SUVs in 2006, and the actual number was zero. There would be a strong inference of corporate scienter, since so dramatic an announcement would have been approved by corporate officials sufficiently knowledgeable about the company to know that the announcement was false.

513 F.3d at 710.

leave open the possibility that "in some unusual circumstances, the core operations inference, without more, may raise the strong inference required by the PSLRA." *Id.* at 785. One example of such unusual circumstances is "where the nature of the relevant fact is of such prominence that it would be 'absurd' to suggest that management was without knowledge of the matter." *Id.* at 786.

Here, Plaintiffs never plausibly allege that specific information was conveyed to Huang[14] or others in NVIDIA's management team. They apparently attempt to do so by relying on the account of CW1, but CW1 lacks personal knowledge of these facts. "CW1 report[s] that the communications regarding the [chip] problems were conducted at a high-level [sic]: 'These were executive level guys.'" CW1's "boss was a senior technical employee, a Director of Quality." "'This guy is not going to be communicating with guys that are at manager level or engineering level.'" From this statement, it is evident that CW1 does not actually know whom from NVIDIA his/her boss communicated with regarding the chip failures. CW1 surmises that, based on his/her boss's status in HP's corporate hierarchy, he was communicating with executive level personnel from NVIDIA. Accordingly, CW1 does not appear to have the requisite personal knowledge to assert that NVIDIA's management team received specific information regarding the defective products.

[14] Plaintiffs do allege that Huang was heavily involved in the design of its chips. They support this allegation with the account of Confidential Witness No. 17 ("CW17"). Nevertheless, CW17 merely indicates that Huang "did not want an undue number of [solder] bumps" on the chips. This description of Huang's involvement does not indicate that he was heavily involved in the design of the flawed GPUs and MCPs or in the decision to use high-lead solder.

Even assuming CW1 did have personal knowledge that his/her boss communicated with NVIDIA's executive-level personnel, the specific information allegedly conveyed related to chip failures, not the root cause of them or NVIDIA's liability. As we discussed above, CW1's assertion that HP had determined the root cause in early 2007 is not plausible.

Again, even assuming HP had determined the root cause in early 2007, Plaintiffs do not allege any facts to support the notion that anyone at NVIDIA arrived at the same conclusion as HP regarding the root cause, or that NVIDIA would be liable. Nor do Plaintiffs provide a basis to infer that anyone at NVIDIA was aware that its financial liability would exceed its normal reserves. Plaintiffs argue that "[k]nowledge of the financial impact of the chip defect should be presumed when the nature of the problem concerned [NVIDIA's] flagship product and was cause for concern to [NVIDIA's] two largest customers." We do not agree. Without factual allegations showing that at least someone at NVIDIA had knowledge of the extent of NVIDIA's liability, there is no basis to presume that NVIDIA's management would have had such knowledge.

Accordingly, neither the collective scienter doctrine nor the core operations doctrine alone gives rise to a strong inference of scienter.

* * * *

Having evaluated Plaintiffs' allegations individually, we find that none creates a strong inference of scienter alone. Evaluating the allegations together, we find that they do not create a strong inference of scienter collectively. The most

that a reasonable factfinder could infer from Plaintiffs' allegations is that NVIDIA was aware that some versions of its GPUs and MCPs were experiencing problems sometime in late 2006 or early 2007. At some point, HP determined the thermal profile that increased the probability that NVIDIA's chips would fail due to cracking at the solder bumps. HP shared with NVIDIA the thermal profile and other data that it believed demonstrated NVIDIA's liability. NVIDIA evidently reproduced these data and thermal profile yet contested that it was at fault for the chip failures. While Plaintiffs infer that NVIDIA was merely delaying disclosure until it had prepared replacement chips, this is not a cogent and compelling inference. NVIDIA indicated in May 2008 (and even in July 2008) that it had not yet determined the root cause of the product failures, although it evidently was working on a solution. Plaintiffs provide no factual basis to discount those statements. Moreover, product flaws are very common in the semiconductor industry, and NVIDIA regularly takes measures to account for this, as reflected in its disclosures. It warns investors of this possibility and sets aside a reserve to account for costs related to those flaws. Although there is some slight support for an inference that NVIDIA knew it was responsible for the problem before its disclosure, and thus acted with intent to deceive at least customers if not investors, a more compelling inference is that NVIDIA did not disclose because it was investigating the extent of the problem, whether it was responsible for it, and if so, whether it would exhaust the reserve. Accordingly, we hold that the complaint's allegations do not give rise to a strong inference of scienter when considered holistically. *See Tellabs*, 551 U.S. at 324.

On appeal, Plaintiffs argue that the Supreme Court has rejected the "inference that defendants were delaying

disclosure while 'investigating the scope of the issue.'" It is true that, in *Matrixx Initiatives*, the Supreme Court rejected the assertion that "'the most cogent inference regarding [the defendant's] state of mind is that it delayed releasing information regarding [a product defect] in order to provide itself an opportunity to carefully review all evidence.'" *Matrixx Initiatives*, 131 S. Ct. at 1324 n.15. Yet the Court also "d[id] not doubt that this may be the most cogent inference in some cases." *Id.* In *Matrixx Initiatives*, the defendant was a pharmaceutical company that manufactured and sold Zicam, an over-the-counter remedy for the common cold. *Id.* at 1313–14. At some point, a doctor began giving public presentations indicating that Zicam was a flawed product and posed dangerous health risks to its users. *Id.* at 1316. In response to these presentations, the defendant "issued a press release that suggested that studies had confirmed" that Zicam was not flawed. *Id.* at 1316, 1324. Nevertheless, the defendant's press release was false, as no such studies existed. *Id.* at 1324. Accordingly, the Court held that "the misleading nature of [the defendant's] press release is sufficient to render the inference of scienter at least as compelling as the inference [that the defendant was investigating the evidence]." *Id.* at 1324 n.15.

Here, there are no similar facts. There is no allegation that the issue of an inherent defect in NVIDIA's Material Set was ever publicly raised prior to NVIDIA's disclosure, nor is there any allegation that NVIDIA knowingly issued a false press release, attempting to discount any public discussion regarding its chips' defects. As such, we reject Plaintiffs' assertion that *Matrixx Initiatives* forecloses the inference that NVIDIA delayed disclosure while it investigated the cause of the chip defects and the extent of its liability.

IV

For the reasons discussed above, we affirm the district court's judgment in its entirety.

AFFIRMED.