EXHIBIT B.4

Exhibit B.4

U.S. Patent No. 8,946,574 ("'574 Patent")

U.S. Patent No. 7,030,860 ("Hsu")

U.S. Patent No. 7,030,860 ("Hsu") was filed on October 8, 1999, and issued on April 18, 2006. Hsu qualifies as
Patent No. 8,946,574 ("'574 Patent") at least under 35 U.S.C. §102(b) (pre-AIA) and anticipates and, alone or w
renders obvious one or more of claims 1–4, 6–11, and 13–15. To the extent Hsu does not disclose one or more l
claims, it would have been obvious to combine the teachings of Hsu with the knowledge of one of ordinary skill
more of the references below to render the claims at issue in the '574 patent invalid.

- U.S. Patent Publication No. 2012/0127079 ("Trend") was filed on November 23, 2010 and published on
qualifies as prior art to the '574 Patent under 35 U.S.C. § 102(e) (pre-AIA).
- U.S. Patent No. 5,386,219 ("Greanias") was filed on July 28, 1993 and published on January 31, 1995. G
prior art to the '574 Patent under 35 U.S.C. § 102(b) (pre-AIA).
- U.S. Patent No. 6,970,160 ("Mulligan") was filed on December 19, 2002 and published on November 29
qualifies as prior art to the '574 Patent under 35 U.S.C. § 102(b) (pre-AIA).
- U.S. Patent No. 7,538,760 ("Hotelling760") was filed on March 30, 2006 and published on May 26, 2009
qualifies as prior art to the '574 Patent under 35 U.S.C. § 102(b) (pre-AIA).
- U.S. Patent No. 7,395,717 ("DeAngelis") was filed on February 10, 2006 and published on July 8, 2008.
as prior art to the '574 Patent under 35 U.S.C. § 102(b) (pre-AIA).
- U.S. Patent Publication No. 2011/0007011 ("Mozdzyn") was filed on June 26, 2010 and published on Jan
Mozdzyn qualifies as prior art to the '574 Patent under 35 U.S.C. §§ 102(a) and 102(e) (pre-AIA).
- U.S. Patent Publication No. 2010/0123670 ("Philipp") was filed on April 10, 2009 and published on May
qualifies as prior art to the '574 Patent under 35 U.S.C. § 102(b) (pre-AIA).
- U.S. Patent Publication No. 2009/0002337 ("Chang") was filed on May 16, 2008 and published on Janua
qualifies as prior art to the '574 Patent under 35 U.S.C. § 102(b) (pre-AIA).
- U.S. Patent Publication No. 2009/0219257 ("Frey") was filed on February 26, 2009 and published on Sep
qualifies as prior art to the '574 Patent under 35 U.S.C. § 102(b) (pre-AIA).
- U.S. Patent No. 5,305,017 ("Gerpheide") was filed on July 13, 1992 and published on April 19, 1994. Ge
prior art to the '574 Patent under 35 U.S.C. § 102(b) (pre-AIA).

- U.S. Patent No. 5,880,411 ("Gillespie") was filed on March 28, 1996 and published on March 9, 1999. G
  prior art to the '574 Patent under 35 U.S.C. § 102(b) (pre-AIA).
- U.S. Patent Publication No. 2008/0158167 ("Hotelling167") was filed on January 3, 2007 and published
  Hotelling qualifies as prior art to the '574 Patent under 35 U.S.C. § 102(b) (pre-AIA).
- U.S. Patent Publication No. 2010/0045632 ("Yilmaz") was filed on April 10, 2009 and published on Febr
  Yilmaz qualifies as prior art to the '574 Patent under 35 U.S.C. § 102(b) (pre-AIA).

The excerpts cited herein are exemplary. For any claim limitation, Defendant may rely on excerpts cited for any
and/or additional excerpts not set forth fully herein to the extent necessary to provide a more comprehensive exp
reference's disclosure of a limitation. Where an excerpt refers to or discusses a figure or figure items, that figure
descriptions of that figure should be understood to be incorporated by reference as if set forth fully herein.

These invalidity contentions are not an admission by Defendants that the accused products or components, inclu
past version of these products or components, are covered by, or infringe the asserted claims, particularly when t
properly construed and applied. These invalidity assertions are also not an admission that Defendants concede or
claim construction(s) implied or suggested by Plaintiff in its Complaint or the associated infringement claim cha
Defendants asserting any claim construction positions through these charts, including whether the preamble is a l
also do not concede or acquiesce that any asserted claim satisfies the requirements of 35 U.S.C. §§ 112 or 101 ar
invalidity contentions only to the extent Plaintiff's assertions may be understood.

Asserted Claims	***Prior Art Disclosures***
Claim 1	
[1pre] An apparatus comprising:	Hsu, alone or in combination with the references listed above and/or the kn of ordinary skill in the art, discloses and/or renders obvious the apparatus r For example, Hsu anticipates and/or alone or in combination with (1) any o Greanias, Mulligan, Hotelling760, DeAngelis, Mozdzyn, Philipp, and Cha Greanias, Mulligan, Hotelling760, and DeAngelis in view of any one of M Chang; and further in light of the knowledge of a person of ordinary skill i and/or renders obvious the apparatus recited in claim 1. For example, Hsu discloses: Hsu at Abstract: A transparent, capacitive sensing system particularly well suited fo devices is described. The sensing system can be used to emulate ph slider switches that are either displayed on an active display device underlying surface. The capacitive sensor can further be used as an graphical user interface, especially if overlaid on top of an active d LCD screen to sense finger position (X/Y position) and contact are display. In addition, the sensor can be made with flexible material f a three-dimensional surface. Because the sensor is substantially tra underlying surface can be viewed through the sensor. This allows t be used for alternative applications that may not necessarily be rela system. Examples include advertising, an additional user interface such as a camera or a biometric security device. Hsu at 1:8-12: The present invention relates to touch sensing transducers and syste particularly, the present invention relates to flexible and transparen

Asserted Claims	***Prior Art Disclosures***
	recognition devices useful in applications such as cursor movement computing devices and other applications. Hsu at 8:1-26: In yet another embodiment, FIG. 7 shows a two-dimensional transp sensor 36. Transparent substrate 84 is adhered using transparent ins transparent conductor layer 64. Transparent conductor 64 contains as shown in FIG. 5A and is coated onto transparent substrate 86. O of transparent substrate 86, transparent conductor layer 70 contains FIG. 5B. Finally, transparent substrate 88 is adhered to transparent transparent insulator 74. This particular embodiment, with substrat sides with transparent conductor layers may allow for less error wh diamonds in the X trace array and the Y trace array. Because substr conductor layers 64 and 70, the alignment of trace arrays can occur etching/deposition of the trace arrays with the opaque photoresist p simplifying pattern alignment of X and Y traces. Proper alignment arrays is critical to the overall transparency of two-dimensional sen human eye can easily detect any systematic misalignment between patterns. Examples of transparent, electrically insulating substrates 84,86, ar described in previous embodiments of two-dimensional sensor 36 a sensor 20. Hsu at Figure 7:

DOCKET ALARM

Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts

Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research

With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips

Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS
Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS
Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS
Sync your system to PACER to automate legal marketing.