

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

CROWDSTRIKE, INC.,
Petitioner

v.

SKYSONG INNOVATIONS, LLC,
Patent Owner

Inter Partes Review Case No. IPR2025-01170
U.S. Patent No. 11,892,897

**PETITIONER'S SUR-REPLY TO PATENT OWNER'S
SUPPLEMENTAL DISCRETIONARY DENIAL BRIEF**

I. INTRODUCTION

Petitioner has established material error, demonstrated the likelihood of delay in the parallel litigation (resulting from transfer and/or stay), mitigated overlap concerns, and demonstrated a lack of commercialization. PO's DD Reply arguments only reinforce these points, solidifying that discretionary denial is improper.

II. THE PATENT OFFICE ERRED IN A MANNER MATERIAL TO PATENTABILITY WHEN IT ALLOWED THE '897 PATENT WITHOUT ADDRESSING *SABOTTKE*

PO does not dispute, nor could it, that *Sabottke* (1) was **not** used in a rejection and (2) is **not** substantially the same as the Examiner applied art. Accordingly, the first two material error prongs of *Ecto World* are satisfied. *Ecto World*, IPR2024-01280, Paper 13 at 5 (precedential). Satisfying the third prong, *Sabottke* describes precisely the teachings that the Applicant contended were lacking from the Examiner applied art—actively scouting hacker communications to predict the likelihood a vulnerability will be exploited **before** disclosure to a vulnerability database. Paper 1 at 24-27; DD Opp at 3-4. The Director need look no further to find material error. Reinforcing the material error, however, the DD Opp. explained that the material error may have resulted from the '897 Patent distinguishing *Sabottke* based on a feature that was not reflected in the claims. Although still material error, a reasonable Examiner may not have anticipated the Applicant would expressly distinguish a prior art reference and then craft claims that read directly on that art.

The DD Reply seeks to distract from the actual record. It first recharacterizes the amendments that led to a notice of allowance, conveniently ignoring the key requirement that vulnerabilities are analyzed *before* their disclosure to a public database. DD Reply at 1-2. PO then notes that the alleged point of distinction with *Sabottke* that the '897 specification identifies ("Random Forest vs. SVM"), was not discussed during prosecution. This observation does not rebut material error. It supports it. The specification discouraged the Examiner from considering *Sabottke* by expressly distinguishing it. That the alleged point of distinction was irrelevant to the claims supports finding that it was material error not to have applied *Sabottke*.

III. PARALLEL LITIGATION TIMELINE FAVORS INSTITUTION

A. Stay is Likely Under Judge Gilliland

The DD Opp. distinguished the stay decisions relied upon in the DD Brief and established that stay is likely here based at least on Judge Gilliland's *VOIP-PAL.com* decision in which a post-institution stay was granted in a case more advanced than this one. PO's DD Reply again advances distinguishable case law from Judge Gilliland, newly relying on *Datanet LLC v. Dropbox Inc.* Paper 12, 3. In that decision, Judge Gilliland noted that stay was requested before institution and expressly distinguished *Datanet's* procedural posture from other post-institution cases in which a stay was granted. EX 1039, 9-10. Here, because Petitioner will seek a stay only *after* the IPR is instituted, the *Datanet* decision is inapposite.

B. Trial Delay is Likely, Especially Considering Likely Transfer

Ignoring the Office’s March 2025 Memorandum that deems relevant “any evidence” that bears on the trial date and citing the 2020 *Fintiv* decision in its stead, PO insists the Director can look only to scheduled trial dates and “not district-wide median statistics.” DD Reply at 3. Recent decisions confirm that district statistics are indeed balanced with scheduled trial dates. *See ClearCorrect Operating, LLC, v. Align Technology, Inc.*, IPR2025-00818, Paper 14 at 2 (PTAB Aug. 29, 2025) (finding factor neutral where “statistics suggest[ed] that trial will not begin” until after the scheduled date and near the FWD). Here, the median time-to-trial in WDTX places the trial date a full year after the currently scheduled date. EX1033, 2. If the Director considers the Fortinet litigation, the EDTX median time-to-trial statistics project a trial date there at least a month *after* the Final Written Decision here. *Id.*

Weighing heavily against treating the scheduled trial date as final, the Court must address CrowdStrike’s motion to transfer prior to a *Markman* hearing (EX1040, 6) and is likely to approve CrowdStrike’s motion to transfer. Paper 9, 11-13. PO ignores the merits of CrowdStrike’s transfer motion, but PO does cite a case that illustrates the likelihood of transfer. In *Datanet*, the Federal Circuit denied a writ of mandamus that sought to vacate Judge Gilliland’s transfer to NDCA for many of the same reasons that support CrowdStrike’s pending transfer motion. *In re Datanet LLC*, No. 2024-137, 2024 WL 4141612, at *1 (Fed. Cir. Sept. 11, 2024).

IV. SOTERA+ STIPULATION MITIGATES ANY OVERLAP CONCERNS

PO rehashes its incorrect stance that Petitioner’s “conditional” *Sotera+* stipulation fails to mitigate overlap between proceedings. *Fintiv* stipulations, by their very nature, are conditional. The IPR art is preserved in the parallel litigation *until* review is instituted. When instituted, Petitioner’s *Sotera+* stipulation will negate *any* overlap. Notably, PO cites no authority for the proposition that Petitioner’s stipulation approach is improper. And PO’s legally unsupported complaints are illogical. PO suggests it is disadvantaged because “claim construction and discovery [will occur] on those overlapping references.” Paper 12, 4-5. But any claim construction issues relevant to these references have already been addressed in the POPR, and fact discovery doesn’t open until after institution. EX2004, 2-3. Accordingly, the *Sotera+* stipulation mitigates any overlap concerns.

V. PO DOES NOT ATTEMPT TO SHOW A NEXUS BETWEEN THE ’897 PATENT CLAIMS AND ANY PRODUCT

PO’s allegation that a third party “was formed to commercialize technologies from” the ’897 Patent falls flat. EX2011, ¶7. Notably missing from any of these assertions is *how* the product, PR1ORITY, implements any claims from the ’897 Patent. Paper 12, 5. Instead, named inventor Shakarian—an interested witness, employed by ASU, which owns SkySong—baldly asserts that the ’897 Patent was implemented with “inventions claimed in U.S. Patent Nos. 10,313,385 and 11,275,900” in a product referred to as PR1ORITY. EX2011, ¶7. Inventor Shakarian

also contends, without analysis, that “[t]he commercial success of PR1ORITY . . . is directly tied to the patented features of the ’897 Patent.” *Id.*, ¶11. He does not provide any evidence of this alleged nexus. Nor does he wrestle with the alleged contributions of the other patents that are also alleged to have been commercialized in PR1ORITY. As the Board and other courts routinely find, such bald assertions of nexus and commercial success fall far short of supporting nonobviousness. *See Fox Factory, Inc. v. SRAM, LLC*, 944 F.3d 1366, 1373 (Fed. Cir. 2019) (“In order to accord substantial weight to secondary considerations in an obviousness analysis, the evidence of secondary considerations must have a nexus to the claims, i.e., there must be a legally and factually sufficient connection between the evidence and the patented invention.”) (internal quotations removed); *Auto. Techs. Int’l, Inc. v. Delphi Corp.*, 776 F. Supp. 2d 469, 484 (E.D. Mich. 2011) (“Plaintiff’s declaration, by an expert who is also Plaintiff’s executive, contains merely a statement asserting the existence of a nexus between the claims and the success. Such a conclusory statement from an interested party is entitled to little weight.”); *GraftTech Int’l Holdings, Inc. v. Laird Techs. Inc.*, 652 F. App’x 973, 979 (Fed. Cir. 2016) (relying on the same evidence in each IPR “undermines [] commercial success arguments because . . . the patents-in-suit are directed to different inventions”). PO does not establish, or even assert, a nexus to the claims of the ’897 Patent. Accordingly, PO does not establish commercialization of any of the Asserted Patents.

Respectfully submitted,

BY: /s/ Paul R. Hart
Paul R. Hart, Reg. No. 59,646

COUNSEL FOR PETITIONER

APPENDIX OF EXHIBITS

Exhibit 1001	U.S. Patent No. 11,892,897 (“’897 Patent”)
Exhibit 1002	File History of the ’897 Patent (“’897 File History”)
Exhibit 1003	Declaration of Dr. Nicholas Bambos (“Dec.”)
Exhibit 1004	Carl Sabottke et. al., <u>Vulnerability Disclosure in the Age of Social Media: Exploiting Twitter for Predicting Real-World Exploits</u> , Proceedings of the 24 th USENIX Security Symposium (2015) (“ <i>Sabottke</i> ”)
Exhibit 1005	U.S. Patent No. 10,264,009 to Smyth et al. (“ <i>Smyth</i> ”)
Exhibit 1006	Elizabeth Phillips et al., <u>Extracting Social Structure from DarkWeb Forums</u> , SOTICS 2015: The Fifth International Conference on Social Media Technologies, Communication, and Informatics, (2015) (“ <i>Phillips</i> ”)
Exhibit 1007	Eric Nunes et al., <u>Darknet and Deepnet Mining for Proactive Cybersecurity Threat Intelligence</u> , Proceedings of the 2016 IEEE Conference on Intelligence and Security Informatics (“ <i>Nunes</i> ”)
Exhibit 1008	U.S. Patent No. 10,652,254 to Kuperman et al. (“ <i>Kuperman</i> ”)
Exhibit 1009	Ericsson Marin et al., <u>Product Offerings in Malicious Hacker Markets</u> , Proceedings of the 2016 IEEE Conference on Intelligence and Security Informatics (“ <i>Marin</i> ”)
Exhibit 1010	Mehran Bozorgi et al., <u>Beyond Heuristics: Learning to Classify Vulnerabilities and Predict Exploits</u> , Proceedings of the Sixteenth ACM Conference on Knowledge Discovery and Data Mining (KDD 2010) (“ <i>Bozorgi</i> ”)
Exhibit 1011	<i>Intentionally left blank</i>
Exhibit 1012	U.S. Patent No. 9,294,498 to Yampolskiy et al. (“ <i>Yampolskiy</i> ”)
Exhibit 1013	Victor Benjamin et al., <u>Securing Cyberspace: Identifying Key Actors in Hacker Communities</u> , Proceedings of the 2012 IEEE International Conference on Intelligence and Security Informatics (2012) (“ <i>Benjamin</i> ”)
Exhibit 1014	Declaration of June Munford (“ <i>Munford Dec.</i> ”)
Exhibit 1015	Mitch Macdonald et al., <u>Identifying Digital Threats in a Hacker Web Forum</u> , IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining, (2015) (“ <i>Macdonald</i> ”)
Exhibit 1016	<i>CTC Sentinel</i> , Volume 6, Issue 7 , July 2013. Combating Terrorism Center at West Point. (“ <i>CTC Sentinel</i> ”)
Exhibit 1017	Vivian Fiona Guetler, <u>Exploring Cyberterrorism, Topic Models and Social Networks off Jihadists Dark Web Forums: A</u>

	<u>Computational Social Science Approach</u> , Graduate Theses, Dissertations, and Problem Reports (2022) (“ <i>Guetler</i> ”)
Exhibit 1018	Screenshot of VirusTotal, found at https://www.virustotal.com/getstarted/vulnerability-management , captured June 12, 2025 (“ <i>VirusTotal.com Screenshot</i> ”)
Exhibit 1019	Elizabeth Phillips et al., <u>Applying Social Network Analysis to Security</u> , International Conference on Cyber Security for Sustainable Society (2015)
Exhibit 1020	<i>Intentionally left blank</i>
Exhibit 1021	Barreras et al., <u>Improving Transparency of the Colombian Peace Treaty with NLP</u> (“ <i>Barreras</i> ”)
Exhibit 1022	Tianjun Fu et al., <u>A Focused Crawler for Dark Web Forums</u> , Journal of the American Society for Information Science and Technology (2010) (“ <i>Fu</i> ”)
Exhibit 1023	Victor Benjamin et al., <u>Exploring Threats and Vulnerabilities in Hacker Web: Forums, IRC and Carding Shops</u> , IEEE Intelligence and Security Informatics (2015)
Exhibit 1024	U.S. Patent No. 11,031,135 to Gates et. al (“ <i>Gates</i> ”)
Exhibit 1025	Mohammed Almukaynizi et al., <u>Predicting Cyber Threats through Hacker Social Networks in Darkweb and Deepweb Forums</u> , CSSSA’s Annual Conference on Computational Social Science (2017), (“ <i>Almukaynizi</i> ”)
Exhibit 1026	Thomas J. Holt et al., <u>Examining the Social Networks of Malware Writers and Hackers</u> , International Journal of Cyber Criminology (2012) (“ <i>Holt</i> ”)
Exhibit 1027	Hoa Khanh Dam et al., <u>Automatic feature learning for predicting vulnerable software components</u> , IEEE Transactions of Software Engineering, (2018) (“ <i>Dam</i> ”)
Exhibit 1028	Michel Edkrantz, <u>Predicting Exploit Likelihood for Cyber Vulnerabilities with Machine Learning</u> , Chalmers Univ. of Tech., (2015) (“ <i>Edkrantz</i> ”)
Exhibit 1029	Petitioner CrowdStrike, Inc.’s Notice of Sotera Plus Stipulation
Exhibit 1030	’897 Patent Assignment to Skysong Innovations, LLC (Executed January 29, 2025)
Exhibit 1031	<i>Quantum Imaging, LLC v. Sony Interactive et al.</i> , No. 1:23-CV-1212-ADA-DTG, Dkt. 357 (W.D. Tex. Dec. 4, 2024)
Exhibit 1032	<i>VOIP-PAL.com, Inc. v. Samsung Elecs. Co., Ltd.</i> , No. 6:21-cv-01246, Dkt. 46 (W.D. Tex. Nov. 30, 2021)

Exhibit 1033	U.S. District Courts Median Time to Trial During 12-Month Period Ending June 30, 2025
Exhibit 1034	<i>Skysong Innovations, LLC v. CrowdStrike, Inc. et al.</i> , No. 7:25-cv-00040-DC-DTG, Dkt. 61 (W.D. Tex. Oct. 9, 2025) (Motion to Transfer)
Exhibit 1035	Docket Navigator Page Showing Success Rate of Motions to Transfer for Judge Gilliland
Exhibit 1036	<i>Virtamove, Corp. v. Google LLC</i> , No. 7:24-cv-00033-DC-DTG, Dkt. 86 (W.D. Tex. Jan. 22, 2025) Order Granting Motion to Transfer Venue
Exhibit 1037	<i>Mobile Data Technologies LLC, v. Meta Platforms, Inc.</i> , No. 7:22-cv-00244-ADA-DTG, Dkt. 83 (W.D. Tex. Dec. 18, 2023) Order Granting Motion to Transfer Venue
Exhibit 1038	<i>Virtamove, Corp. v. Google LLC</i> , No. 7:24-cv-00033-DC-DTG, Dkt. 102 (W.D. Tex. May 7, 2025) Order of Transfer
Exhibit 1039	<i>Datanet LLC v. Dropbox Inc.</i> , No. 6:22-cv-01142-OLG-DTG, (W.D. Tex. Dec. 28, 2023) Order Denying Motion to Stay
Exhibit 1040	Standing Order Governing Proceedings (OGP) 4.4 – Patent Cases, Western District of Texas Waco Division

CERTIFICATE OF SERVICE ON PATENT OWNER

Pursuant to 37 C.F.R. § 42.6(e), the undersigned certifies that on November 26, 2025, the foregoing *Petitioner's Sur-Reply to Patent Owner's Supplemental Discretionary Denial and Exhibits* were served via electronic filing with the Board and via Electronic Mail on the following counsel of record for PO:

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