

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

META PLATFORMS, INC.; INSTAGRAM, INC.; WHATSAPP LLC; META
PLATFORMS TECHNOLOGIES, LLC; AND GIPHY, INC.,

Petitioners

v.

VL COLLECTIVE IP LLC,

Patent Owner

U.S. Patent No. 7,436,980

Case IPR2023-00924

**PETITIONERS' REPLY IN SUPPORT OF MOTION TO SUBMIT
SUPPLEMENTAL INFORMATION PURSUANT TO 37 C.F.R. § 42.123(a)**

Petitioners’ Reply in Support of its Motion to Submit Supplemental Information

TABLE OF CONTENTS

I.	PO MISCONSTRUES <i>REDLINE</i> , <i>HULU</i> , AND OTHER CASES; PETITIONERS ARE NOT “BOLSTERING” ANY “DEFICIENCY”	1
II.	ALL FACTORS SUPPORT GRANTING PETITIONERS’ MOTION	3
III.	PO’S CRITICISM AS TO RELEVANCE IS UNFOUNDED	5

Petitioners' Reply in Support of its Motion to Submit Supplemental Information

TABLE OF AUTHORITIES**Page(s)****Cases**

<i>Apple Inc. v. Virnetx Inc.</i> , IPR2015-00810, Paper 21 (P.T.A.B. Nov. 2, 2015).....	4
<i>Artesian Home Prods. v. Gutterglove, Inc.</i> , IPR2018-00031, Paper 18 (P.T.A.B. Mar. 19, 2018).....	2
<i>Artesian Home Prods. v. Gutterglove, Inc.</i> , IPR2018-00031, Paper 24 (P.T.A.B. May 31, 2018)	2
<i>Baker Hughes Inc. v. Packers Plus Energy Servs., Inc.</i> , IPR2016-00597, Paper 80 (P.T.A.B. Sept. 26, 2018).....	4
<i>Hulu, LLC v. Sound View Innovations, LLC</i> , IPR2018-01039, Paper 29 (P.T.A.B. Dec. 20, 2019)	1, 2, 4, 5
<i>Nobel Biocare Servs. AG v. Intradent USA, Inc.</i> , 903 F.3d 1365 (Fed. Cir. 2018)	5
<i>Pac. Mkt. Int'l v. Ignite USA, LLC</i> , IPR2014-00561, Paper 23 (P.T.A.B. Dec. 2, 2014)	3
<i>Palo Alto Networks v. Juniper Networks, Inc.</i> , IPR2013-00369, Paper 37 (P.T.A.B. Feb. 5, 2014).....	3
<i>Redline Detection, LLC v. Star Envirotech, Inc.</i> , 811 F.3d 435 (Fed. Cir. 2015)	1
<i>Redline Detection, LLC v. Star Envirotech, Inc.</i> , IPR2013-00106, Paper 24 (P.T.A.B. Aug. 5, 2013).....	1
<i>SAS Inst., Inc. v. Iancu</i> , 138 S. Ct. 1348 (2018).....	2
<i>VideoLabs, Inc. et al v. Meta Platforms, Inc. et al</i> , Case No. 1-22-cv-00680, Dkt. 15 (D. Del. Aug. 29, 2022)	vi

Petitioners' Reply in Support of its Motion to Submit Supplemental Information

TABLE OF EXHIBITS

Exhibit No.	Description
1001	U.S. Patent No. 7,436,980 ('980 Patent)
1002	File History of U.S. Patent No. 7,436,980
1003	Provisional Application No. 60/574,799
1004	Declaration of Dr. Chandrajit Bajaj
1005	Curriculum Vitae of Dr. Chandrajit Bajaj
1006	Liang Zhao, Dressed Human Modeling, Detection, and Parts Localization, The Robotics Institute, Carnegie Mellon University (2001) ("Zhao")
1007	U.S. Patent No. 6,301,370 ("Steffens")
1008	U.S. Patent No. 7,200,266 ("Ozer")
1009	Leonid Sigal, Sidharth Bhatia, Stefan Roth, Michael J. Black & Michael Isard, <i>Tracking Loose-limbed People</i> , IEEE Computer Society Conference on Computer Vision and Pattern Recognition (2004) ("TLP")
1010	Program Documents for the 2004 IEEE Computer Society Conference on Computer Vision and Pattern Recognition (2004), http://tab.computer.org/pamitc/archive/cvpr2004/index.html
1011	Adam Baumberg & David Hogg, <i>Generating Spatiotemporal Models from Examples</i> , School of Computer Studies, University of Leeds, http://www.bmva.org/bmvc/1995/bmvc-95-040.pdf ("Baumberg")
1012	Erik B. Sudderth, Alexander T. Ihler, William T. Freeman & Alan S. Willsky, <i>Non-parametric Belief Propagation</i> , IEEE Conference on Computer Vision and Pattern Recognition, (June 2003), https://www.ics.uci.edu/~ihler/papers/tr2551.pdf)
1013	Declaration of Jessica Benner regarding "Zhao", Carnegie Mellon University (April 4, 2023)

Petitioners' Reply in Support of its Motion to Submit Supplemental Information

Exhibit No.	Description
1014	Declaration of Carl Megeski regarding “Zhao,” ProQuest (March 2, 2023)
1015	Leonid Sigal, Michael Isard, Benjamin H. Sigelman & Michael J. Black, <i>Attractive people: Assembling loose-limbed models using non-parametric belief propagation</i> , Advances in Neural Information Processing Systems 16, NIPS 1539–46 (MIT Press 2003)
1016	Hedvig Sidenbladh, Michael J. Black & David Fleet, <i>Stochastic tracking of 3D human figures using 2D image motion</i> , European Conference on Computer Vision, 702–18, LNCS 1843 (Springer-Verlag 2000)
1017	Noel A. C. Cressie, <i>Statistics for Spatial Data</i> , Chapters 1, 9, John Wiley and Sons (1993)
1018	Yaakov Bar-Shalom, X. Rong Li & Thiagalingam Kirubarajan, <i>Estimation with Applications to Tracking and Navigation: Theory, Algorithms and Software</i> , Chapters 1–2, 11, John Wiley and Sons, (2001)
1019	M. Isard, <i>PAMPAS: Real-valued graphical models for computer vision</i> , CVPR, vol. 1, at 613–20 (2003)
1020	D. L. Alspach & H. W. Sorenson. <i>Nonlinear Bayesian estimation using Gaussian sum approximations</i> , IEEE Trans. AC, 17(4): at 439–48, (August 1972)
1021	James M. Coughlan & Sabino J. Ferreira, <i>Finding deformable shapes using loopy belief propagation</i> , ECCV 453–68 (2002)
1022	F. De la Torre & M. J. Black., <i>Robust parameterized component analysis: Theory and applications to 2D facial modeling</i> , ECCV 653–69 (2002)
1023	S. L. Lauritzen, <i>Graphical Models</i> , Chapters 1, 3, Oxford University Press, Oxford (1996)
1024	A. Doucet, N. de Freitas, & N. Gordon, editors. <i>Sequential Monte Carlo Methods in Practice</i> , Chapters 5, 16, Springer-Verlag, New York (2001)

Petitioners' Reply in Support of its Motion to Submit Supplemental Information

Exhibit No.	Description
1025	Vladimir Pavolovic, James M. Rehg, Tat-Jen Cham & Kevin Murphy, <i>A dynamic Bayesian network approach to figure tracking using learned dynamic models</i> , Int'l. Conf. on Computer Vision at 94–101 (1999)
1026	Y. Wu, G. Hua & T. Yu, <i>Tracking articulated body by dynamic Markov network</i> , Int'l. Conf. on Computer Vision at 1094–101 (2003)
1027	Christopher Bregler & Jitendra Malik, <i>Tracking people with twists and exponential maps</i> , CVPR, at 8–15 (1998)
1028	J. Deutscher, A. Davison & I. Reid, <i>Automatic partitioning of high dimensional search spaces associated with articulated body motion capture</i> , IEEE Computer Society Conference on Computer Vision and Pattern Recognition, at 669–76 (2001)
1029	Cristian Sminchisescu & Bill Triggs, <i>Covariance scaled sampling for monocular 3D body tracking</i> , IEEE Computer Society Conference on Computer Vision and Pattern Recognition, vol. 1, at 447–54 (2001)
1030	John MacCormick & Michael Isard, <i>Partitioned sampling, articulated objects, and interface-quality hand tracking</i> , European Conference on Computer Vision (2), at 3–19 (2000)
1031	Yacov Hel-Or & Michael Werman, <i>Constraint Fusion for Recognition and Localization of Articulated Objects</i> , International Journal of Computer Vision 19(1), at 5–28 (1996)
1032	Y. Weiss & W. T. Freeman, <i>Correctness of belief propagation in Gaussian graphical models of arbitrary topology</i> , Neural Comp., 13:2173–2200 (2001)
1033	M. Fischler & R. Elschlager, <i>The representation and matching of pictorial structures</i> , IEEE. Trans. Computers, 22(1):67–92 (1973)

Petitioners' Reply in Support of its Motion to Submit Supplemental Information

Exhibit No.	Description
1034	M. Burl, M. Weber & P. Perona, <i>A probabilistic approach to object recognition using local photometry and global geometry</i> , European Conference on Computer Vision at 628–41 (1998)
1035	P. Felzenszwalb & D. Huttenlocher, <i>Efficient matching of pictorial structures</i> , IEEE Computer Society Conference on Computer Vision and Pattern Recognition, Vol. 2, at 66–73 (2000)
1036	D. Ramanan & D. Forsyth, <i>Finding and tracking people from the bottom up</i> , IEEE Computer Society Conference on Computer Vision and Pattern Recognition, Vol. II, at 467–716 (2003)
1037	Andrew Blake & Michael Isard, <i>Active Contours</i> , Chapters 7, 8, Springer-Verlag (1998)
1038	D. L. Alspach, <i>Gaussian Sum Approximations in Nonlinear Filtering and Control</i> , Information Sciences 7, 271–290 (1974)
1039	A. R. Tilley, <i>The Measure of Man and Woman: Human Factors in Design</i> H.D. Associates (1993)
1040	Paul Viola & Michael Jones, <i>Rapid Object Detection using a Boosted Cascade of Simple Features</i> , Conference on Computer Vision and Pattern Recognition (2001)
1041	Hedvig Sidenbladh & Michael J. Black, <i>Learning Statistics Learning the Statistics of People in Images and Video</i> , International Journal of Computer Vision 54 (1/2/3), at 183–209 (2003)
1042	Jonathan S. Yedidia, William T. Freeman & Yair Weiss, <i>Generalized Belief Propagation</i> , Advances in Neural Info. Proc. Sys. 13, at 689–95 (2000)
1043	<i>VideoLabs, Inc. et al v. Meta Platforms, Inc. et al</i> , Case No. 1-22-cv-00680, Dkt. 15 (D. Del. Aug. 29, 2022)
1044	Patent Assignment for U.S. Patent No. 7,436,980
1045	Patent Assignment for U.S. Patent No. 7,436,980

Petitioners' Reply in Support of its Motion to Submit Supplemental Information

Exhibit No.	Description
1046	Application Data Sheet 37 C.F.R. 1.76 for U.S. Patent No. 9,189,886
1047	Patent Assignment for U.S. Patent No. 7,436,980
1048	<i>CVPR Technical Program: Call for Papers</i> , IEEE Computer Society Conference on Computer Vision and Pattern Recognition, Washington, DC, June 27 – July 2, 2004
1049	ResearchGate Web Page for TLP
1050	Declaration of Dr. Sylvia Hall-Ellis relating to TLP

* Unless otherwise indicated, all emphasis added.

OTHER EXHIBITS

Exhibit No.	Description
2001	Declaration of Jaime F. Cardenas-Navia in Support of Motion for Admission <i>Pro Hac Vice</i>
2002	Zou et al., Object Detection in 20 Years: A Survey (May 16, 2019).
2003	Email dated December 29, 2023 from Petitioners to Board re Motion for Authorization
3001	Email dated December 29, 2023 from Board to Parties re Hearings for IPR2023-00923 and IPR2023-00924

Petitioners' Reply in Support of its Motion to Submit Supplemental Information

I. PO MISCONSTRUES *REDLINE*, *HULU*, AND OTHER CASES; PETITIONERS ARE NOT “BOLSTERING” ANY “DEFICIENCY”

Redline is inapposite and addresses an atypical situation where petitioner sought to submit a 60-page “de novo expert report” “for the first time” via 37 C.F.R. § 42.123(a) after patent owner’s preliminary response and after the Board’s institution decision. *Redline Detection, LLC v. Star Envirotech, Inc.*, 811 F.3d 435, 447-49 (Fed. Cir. 2015); *Redline*, IPR2013-00106, Paper 24 at 4 (PTAB Aug. 5, 2013) (§ 42.123(a) does not permit “petitioner to wait for the Board to narrow the [petition’s] grounds” in order to “create a more focused declaration at less expense that will bolster its position” and sandbag patent owner). No such sandbagging or “wait-and-see” approach was utilized by Petitioners here. Petitioners’ supplemental information cannot surprise PO (given PO opposed said submission, EX2003), and it does not offer “a new theory” of TLP’s public accessibility. Instead, EXs. 1049–1050 are limited to address a specific issue “relevant to a claim for which trial has been instituted”—PO’s argument that TLP was not publicly available and the Board’s statement that “Petition does not show a reasonable likelihood that TLP was published before May 27, 2004.” Paper 11 at 49; Paper 7 at 22–27; 37 C.F.R. § 42.123(a) (“***Once a trial has been instituted***, a party may file a motion to submit supplemental information...”).

PO’s narrow reading of *Hulu* is likewise incorrect. PO argues that a petitioner can ***only*** submit supplemental information if a patent owner does not challenge a

Petitioners' Reply in Support of its Motion to Submit Supplemental Information reference's prior art status. But where a patent owner *does* challenge public accessibility, supplemental information would be an impermissible "wait-and-see" tactic to "bolster deficiencies." Paper 24 at 6. PO's misreading creates a catch-22 and is directly contradicted by *Hulu. Hulu, LLC v. Sound View Innovations, LLC*, IPR2018-01039, Paper 29 at 14-16 (PTAB Dec. 20, 2019) (Precedential) (discussing different ways a petitioner can present evidence after a petition is filed). PO further argues that Petitioners' supplemental information is not "responsive" because PO did not proffer rebuttal evidence. Paper 24 at 8–9. PO's cited authority does not support such a proposition. Indeed, EXs. 1049–1050 support Dr. Bajaj's declaration about CVPR 2004 and the paper submission process, which PO contends was insufficient to show public accessibility. As to PO's timing argument (Paper 24 at 10–12), Petitioners already addressed why they properly requested authorization to file this motion. Paper 18 at 2, 7.

PO's reliance on *Artesian*, among others, is also misplaced. In *Artesian* (decided before *SAS Inst., Inc. v. Iancu*, 138 S. Ct. 1348 (2018)), the Board denied institution of the specific ground holding that a U.S. patent reference was not prior art because it published after the filing date of the challenged patent. *Artesian Home Prods. v. Gutterglove, Inc.*, IPR2018-00031, Paper 18 at 13-14 (PTAB Mar. 19, 2018). The Board further denied *Artesian*'s supplemental information because it was not "additional" but rather "necessary" evidence. *Artesian*, IPR2018-00031, Paper

Petitioners' Reply in Support of its Motion to Submit Supplemental Information 24 at 3–4 (PTAB May 31, 2018). Unlike *Artesian*, this IPR is akin to those where the Board has allowed supplemental “additional” information. *Pac. Mkt. Int'l v. Ignite USA, LLC*, IPR2014-00561, Paper 23 at 3–5 (PTAB Dec. 2, 2014); *Palo Alto Networks v. Juniper Networks, Inc.*, IPR2013-00369, Paper 37 at 3–5 (PTAB Feb. 5, 2014). EXs. 1049–1050 are not offering new or “necessary” evidence; rather they are supplementing a position already taken in the Petition and known to PO. Petition, 6, 8-9; EX1004, ¶¶65-67; EX1010.

II. ALL FACTORS SUPPORT GRANTING PETITIONERS' MOTION

First, PO's conclusory statements that Petitioners' supplemental information “changes the evidence” initially presented in the Petition, “raise[s] new issues and theories,” and “impermissibly bolster[s] identified deficiencies” are incorrect. Paper 24, 12–13. EXs. 1049–1050 are not “supplant[ing]” Dr. Bajaj's declaration as to the public availability of TLP. Dr. Bajaj, who attended CVPR 2004, and whose own paper (like TLP) was submitted and selected for publication, explained that papers submitted by the November 19, 2003 submission deadline would have been made publicly available to academics, *i.e.*, POSITAs. EX1004, ¶¶66. Dr. Hall-Ellis' declaration and the ResearchGate website supplement Dr. Bajaj's statements. EX1050, EX1049. That TLP would have been publicly available at least by January 31, 2004 is consistent with and supplements Dr. Bajaj's statement that TLP would have been publicly available after the November 19, 2003 deadline.

Petitioners' Reply in Support of its Motion to Submit Supplemental Information

Second, PO's complaint that it would be "extraordinarily unjust" for PO to have to address EXs. 1049–1050 is unpersuasive. Paper 24 at 13–14. There is nothing extraordinary about librarian declarations supplementing public accessibility of a reference or the timing of such submissions. Indeed, Dr. Hall-Ellis has provided such librarian declarations in over 800 different IPRs. The Board also grants motions for supplemental information containing much more than 50 pages. *Apple Inc. v. Virnetx Inc.*, IPR2015-00810, Paper 21 at 4–7, 9 (PTAB Nov. 2, 2015) (granting motion to submit "almost 900 pages" of supplemental information).

Third, PO argues that Petitioners are "effectively extend[ing] the length of the Petition by at least 23 pages," which is "unfair." Paper 24 at 14. Petitioners' supplemental information is directed to the limited issue of public accessibility, for which PO is well aware. It therefore lacks credulity that a librarian declaration would pose insurmountable prejudice to PO. *Hulu*, Paper 29 at 15 (collecting cases granting motions to submit librarian declaration as supplemental information). PO's attempt to distinguish *Baker Hughes* does not hold water. There, patent owner argued that the PTAB should not allow entry of one exhibit relating to public accessibility because it would require patent owner "to launch a new attack on Petitioner's public accessibility assertion." *Baker Hughes Inc. v. Packers Plus Energy Servs., Inc.*, IPR2016-00597, Paper 80 at 2–3 (PTAB Sept. 26, 2018). The Board disagreed and granted the motion. Moreover, the parties here have stipulated and agreed to extend

Petitioners’ Reply in Support of its Motion to Submit Supplemental Information the deadline for PO’s Response by 2 weeks, which defrays any prejudice on PO. Paper 22 at 1.

III. PO’S CRITICISM AS TO RELEVANCE IS UNFOUNDED

PO wholly ignores Petitioners’ discussion as to relevance of EXs. 1049–1050. *Compare* Paper 18 at 3–6 *with* Paper 24 at 4-5. PO’s sole argument that Petitioners’ supplemental information is not “relevant” focuses on one paragraph of Dr. Hall-Ellis’ declaration, where she explains that the two-volume set of *CVPR 2004* as indexed at the Linda Hall Library, was “publicly available on or shortly after August 30, 2004.” EX1050, ¶44. PO disregards Dr. Hall-Ellis’ explanation that the August 30, 2004 date is associated with Attachment 1A’s “Entered” field of “20040830” and the additional actions she undertook to support her ultimate opinion that TLP was published and/or publicly accessible by at least January 31, 2004. *Id.*, ¶¶40–43, 45–48. Printed dates and stamps “are considered as part of the totality of the evidence,” and a catalog date is nevertheless relevant evidence supporting the expert opinion. *Hulu*, Paper 29 at 17–18 (PTAB Dec. 20, 2019) (Precedential); *Nobel Biocare Servs. AG v. Intradent USA, Inc.*, 903 F.3d 1365, 1376 (Fed. Cir. 2018). PO does not, and cannot, dispute that EXs. 1049–1050 are entirely “relevant to a claim” for which trial was instituted, as TLP forms the Petition’s single-reference obviousness Ground IV. Paper 11 at 48–49, 56.

Petitioners' Reply in Support of its Motion to Submit Supplemental Information

March 13, 2024

Respectfully submitted,

/s/ W. Todd Baker

W. Todd Baker (Reg. No. 45,265)
todd.baker@kirkland.com
Postal and Hand-Delivery Address:
KIRKLAND & ELLIS LLP
1301 Pennsylvania Ave., N.W.
Washington, D.C. 20004
T: (202) 389-5000
F: (202) 389-5200

Ellisen Shelton Turner (Reg. No. 54,503)
ellisen.turner@kirkland.com
Postal and Hand-Delivery Address:
KIRKLAND & ELLIS LLP
2049 Century Park East, 37th Floor
Los Angeles, CA 90067
T: (310) 552-4200
F: (310) 552-5900

Jonathan D. Brit (Reg. No. 75,646)
jonathan.brit@kirkland.com
Postal and Hand-Delivery Address:
KIRKLAND & ELLIS LLP
601 Lexington Avenue
New York, NY 10022
T: (212) 390-4209
F: (212) 446-4900

Jennifer R. Bush (Reg. No. 50,784)
jbush@fenwick.com
Postal and Hand-Delivery Address:
FENWICK & WEST LLP
801 California Street
Mountain View, CA 94041
T: (650) 988-8500
Attorneys for Petitioners

CERTIFICATE OF SERVICE

The undersigned hereby certifies that a copy of the foregoing document was served on March 13, 2024, via electronic mail to counsel of record for the Patent Owner at the following:

Christine E. Lehman (Reg. No. 38,535)
clehman@reichmanjorgensen.com
Philip J. Eklem (Reg. No. 76,490)
peklem@reichmanjorgensen.com
REICHMAN JORGENSEN LEHMAN & FELDBERG LLP
1909 K Street, NW, Suite 800
Washington, DC 20006

Jaime F. Cardenas-Navia
jcardenas-navia@reichmanjorgensen.com
Michael Matulewicz-Crowley (Reg. No. 72,220)
mmatulewicz-crowley@reichmanjorgensen.com
REICHMAN JORGENSEN LEHMAN & FELDBERG LLP
400 Madison Avenue, Suite 14D
New York, NY 10017

RJ_VideoLabs-Facebook@reichmanjorgensen.com

/s/ W. Todd Baker

W. Todd Baker
(Reg. No. 45,265)