

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

KRISP TECHNOLOGIES, INC.,
Petitioner

v.

Sanas.ai Inc.,
Patent Owner

Inter Partes Review Case No. PGR2026-00033
U.S. Patent No. 12,417,756

PETITION'S UPDATED EXHIBIT LIST

APPENDIX OF EXHIBITS

Exhibit 1001	U.S. Patent No. 12,417,756 (“756 Patent”)
Exhibit 1002	Prosecution History of U.S. Patent No. 12,417,756 (“756 Prosecution History”)
Exhibit 1003	Declaration of Christopher Schmandt
Exhibit 1004	U.S. Patent Application Publication No. 2024/0098218 to Nguyen et al. (“ <i>Nguyen</i> ”)
Exhibit 1005	U.S. Patent No. 10,163,451 to Dirac et al. (“ <i>Dirac</i> ”)
Exhibit 1006	U.S. Patent Application Publication No. 2022/0417659 to Narayanan et al. (“ <i>Narayanan</i> ”)
Exhibit 1007	U.S. Patent Application Publication No. 2024/0274122 to Wang et al. (“ <i>Wang</i> ”)
Exhibit 1008	B.H. Juang and Lawrence Rabiner, <i>Automatic Speech Recognition – A Brief History of the Technology Development</i> , 2004 (“ <i>Juang</i> ”)
Exhibit 1009	Li Deng, <i>Deep learning: from speech recognition to language and multimodal processing</i> , APSIPA Transactions on Signal and Information Processing, Vol. 5, E. 1, 2016 (“ <i>Deng</i> ”)
Exhibit 1010	Vlado Delic, Zoran Peric, Milan Secujski, Niksa Jakovljevic, Jelena Nikolic, Dragisa Miskovic, Nikola Simic, Sinisa Suzic, and Tijana Delic, <i>Speech Technology Progress Based on New Machine Learning Paradigm</i> , Computational Intelligence and Neuroscience, 2019 (“ <i>Delic</i> ”)
Exhibit 1011	S.M. Kamruzzaman, A.N.M. Rezaul Karim, Saiful Islam, and Emdadul Haque, <i>Speaker Identification using MFCC-Domain Support Vector Machine</i> , International Journal of Electrical and Power Engineering, 2007 (“ <i>Kamruzzaman</i> ”)
Exhibit 1012	U.S. Patent Application Publication No. 2005/0066209 to Kee et al. (“ <i>Kee</i> ”)
Exhibit 1013	C. O’Callaghan, Pitch, (https://web.archive.org/web/20150930164248/http://caseyocallaghan.com/research/papers/Pitch.pdf) September 30, 2015. (“ <i>O’Callaghan</i> ”)
Exhibit 1014	Berrak Sisman, Mingyang Zhang and Haizhou Li, <i>Group Sparse Representation with WaveNet Vocoder Adaptation for Spectrum and Prosody Conversion</i> , IEEE/ACM Transactions on Audio, Speech, and Language Processing, 27, (2019) (“ <i>Sisman</i> ”)
Exhibit 1015	Ivan Chow and Steven Brown, <i>A Musical Approach to Speech Melody</i> , Frontiers in Psychology, Vol. 9, 2018 (“ <i>Chow</i> ”)

Exhibit 1016	Johan 't Hart, Rene Collier, and Antonie Cohen, <i>A Perceptual Study of Intonation</i> , Press Syndicate of the University of Cambridge, ISBN-0521366437, 1990 (“ <i>Hart</i> ”)
Exhibit 1017	Elise Piazza, Marius Iordan, and Casy Lew-Williams, <i>Mothers Consistently Alter their Unique Vocal Fingerprints when Communicating with Infants</i> , Current Biology, Vol 27, Issue 20, 2017 (“ <i>Piazza</i> ”)
Exhibit 1018	U.S. Patent No. 10,614,826 to Huffman et al. (“ <i>Huffman</i> ”)
Exhibit 1019	U.S. Patent Application Publication No. 2024/0304200 to Kashet et al. (“ <i>Kashet</i> ”)
Exhibit 1020	Constantinos Xydeas, <i>Differential Encoding Techniques Applied to Speech Signals</i> , 1978, (“ <i>Xydeas</i> ”)
Exhibit 1021	Jaison Joshy and Koj Sambyo, <i>A Comparison and Contrast of the Various Feature Extraction Techniques in Speaker Recognition</i> , International Journal of Signal Processing, Image Processing and Pattern Recognition, Vol. 9, No. 11, 2016 (“ <i>Joshy</i> ”)
Exhibit 1022	Gaurav Giroti, Tejas Nakhate, Mahesh Laddha, and Prof. Manoj Sarve, <i>Person Identification through Voice using MFCC and Multi-class SVM</i> , International Research Journal of Engineering and Technology, Vo. 5, Issue 5, 2018 (“ <i>Giroti</i> ”)
Exhibit 1023	Cathy van Eck, <i>Between Air and Electricity</i> , Bloomsburry Academic, ISBN-978151327609 PDF, 2017 (“ <i>Eck</i> ”)
Exhibit 1024	Ashok Ambardar, <i>Analog and Digital Signal Processing</i> , Second Edition, Brooks/Cole Publishing Company, ISBN-9780534954093, 1999 (“ <i>Ambardar</i> ”)
Exhibit 1025	Mehrayar Mohri, Afshin Rostamizadeh and Ameet Talwalkar, <i>Foundations of Machine Learning second edition</i> , The MIT Press, 2018 (“ <i>Mohri</i> ”)
Exhibit 1026	Su-Hyun Han, Ko Woon Kim, Sang Yun Kim and Young Chul Youn, <i>Artificial Neural Network: Understanding the Basic Concepts without Mathematics</i> , Dement Neurocogn Disord, 2018 Sep;17(3):83-89 (“ <i>Han</i> ”)
Exhibit 1027	Jason Brownlee, <i>Difference Between Algorithm and Model in Machine Learning</i> (August 19, 2020), https://machinelearningmastery.com/difference-between-algorithm-and-model-in-machine-learning/ (“ <i>Brownlee</i> ”)
Exhibit 1028	Maurya Vijayaramachandran, and Siddique Afraaz N, <i>Impact of Hidden Layer in Artificial Neural Networks</i> , IOSR Journal of

	Engineering, Vol. 10, Issue 11, November 2020, Series -I, 33-38 (“ <i>Siddique</i> ”)
Exhibit 1029	Maad M. Mijwel, Adam Esen and Aysar Shamil, <i>Overview of Neural Networks</i> , Babylonian Journal of Machine Learning, 1:2, April 2019 (“ <i>Mijwel</i> ”)
Exhibit 1030	U.S. Patent No. 8,564,544 to Jobs et al. (“ <i>Jobs</i> ”)
Exhibit 1031	Qingchen Zhang, Laurence Yang, Zhikui Chen, and Peng Li, <i>A Survey on Deep Learning for Big Data</i> , Information Fusion, Vol. 42, 2018 (“ <i>Zhang</i> ”)
Exhibit 1032	Josef Michalek and Jan Vanek, <i>An Open-Source GPU-Accelerated Feature Extraction Tool</i> , 12 th International Conference on Signal Processing, 2014 (“ <i>Michalek</i> ”)
Exhibit 1033	Hendrik Purwins, Bo Li, Tuomas Virtanen, Jan Schluter, Shuo-yiin Chang, and Tara Sainath, <i>Deep Learning for Audio Signal Processing</i> , IEEE Journal of Selected Topics in Signal Processing, Vol. 13, No. 2, 2019 (“ <i>Purwins</i> ”)
Exhibit 1034	U.S. Patent Application Publication No. 2021/0082402 to Sun et al. (“ <i>Sun</i> ”)
Exhibit 1035	John Holmes and Whendy Holmes, <i>Speech Synthesis and Recognition</i> , Second Edition, ISBN 0-7484-0856-8 (hc.)—ISBN 0-7484-0857-6 (pbk.), Taylor & Francis e-Library, 2003 (“ <i>Holmes</i> ”)
Exhibit 1036	Declaration of June Munford
Exhibit 1037	Petitioner’s Stipulation

Dated: April 24, 2026

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CERTIFICATE OF SERVICE ON PATENT OWNER
UNDER 37 C.F.R. § 42.105

Pursuant to 37 C.F.R. § 42.6(e), the undersigned certifies that on April 24, 2026, the foregoing *Petitioner's Updated Exhibit List with Exhibit* was served via electronic filing with the Board and via Electronic Mail on Patent Owner:

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