

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Axon Enterprise, Inc. and Dedrone Holdings, Inc.

Petitioners,

v.

Airspace Defense, Inc.

Patent Owner

Case No. IPR2025-00530

U.S. Patent No. 10,249,199

**DECLARATION OF JUNE ANN MUNFORD IN SUPPORT OF PATENT
OWNER'S REPLY TO
PETITIONERS' OPPOSITION TO
PATENT OWNER'S REVISED MOTION TO AMEND**

1. My name is June Ann Munford. I am over the age of 18, have personal knowledge of the facts set forth herein, and am competent to testify to the same.
2. I earned a Master of Library and Information Science (MLIS) from the University of Wisconsin-Milwaukee in 2009. I have over ten years of experience in the library/information science field. Beginning in 2004, I have served in various positions in the public library sector including Assistant Librarian, Youth Services Librarian and Library Director. I have attached my Curriculum Vitae as Exhibit EX2007.
3. During my career in the library profession, I have been responsible for materials acquisition for multiple libraries. In that position, I have cataloged, purchased and processed incoming library works. That includes purchasing materials directly from vendors, recording publishing data from the material in question, creating detailed material records for library catalogs and physically preparing that material for circulation. In addition to my experience in acquisitions, I was also responsible for analyzing large collections of library materials, tailoring library records for optimal catalog search performance and creating lending agreements between libraries during my time as a Library Director.

4. I am fully familiar with the catalog record creation process in the library sector. In preparing a material for public availability, a library catalog record describing that material would be created. These records are typically written in Machine Readable Catalog (herein referred to as "MARC") code and contain information such as a physical description of the material, metadata from the material's publisher, and date of library acquisition. In particular, the 008 field of the MARC record is reserved for denoting the date of creation of the library record itself. As this typically occurs during the process of preparing materials for public access, it is my experience that an item's MARC record indicates the date of an item's public availability.
5. Typically, in creating a MARC record, a librarian would gather various bits of metadata such as book title, publisher and subject headings among others and assign each value to a relevant numerical field. For example, a book's physical description is tracked in field 300 while title/attribution is tracked in field 245. The 008 field of the MARC record is reserved for denoting the creation of the library record itself. As this is the only date reflecting the inclusion of said materials within the library's collection, it is my experience that an item's 008 field accurately indicates the date of an item's public availability.

6. I am familiar with the Internet Archive, a digital library accessible to the general public. Among other services that the Internet Archive makes available to the general public is the Wayback Machine, an online archive of the web. The Internet Archive's Wayback Machine service archives webpages as of a certain capture date to track changes in the web over time. The Internet Archive has been in operation as a nonprofit library since 1996 and has hosted the Wayback Machine service since its inception in 2001. During my time as a librarian, I frequently used the Internet Archive's Wayback Machine for research and instruction purposes. This includes teaching instructional classes on using the Wayback Machine to library patrons and using the Wayback Machine to research reference inquiries that require hard-to-find online resources. I consider the Internet Archive's recordskeeping to be as rigorous and detailed as other formal library recordskeeping practices such as MARC records, OCLC records and Dublin Core.
7. I have reviewed Exhibit EX2008, a document entitled "FIPS PUB 186-4."
8. Attached hereto as Exhibit EX2015 is a screen capture of the Internet Archive Wayback Machine entry for

<http://nvlpubs.nist.gov/nistpubs/FIPS/NIST.FIPS.186-4.pdf>. I secured these screen captures myself from

<https://web.archive.org/web/20130809192033/http://nvlpubs.nist.gov/nistpubs/FIPS/NIST.FIPS.186-4.pdf>. This record was captured as of August 9, 2013.

9. Exhibit EX2015 is an Internet Archive capture of a file entitled "FIPS PUB 186-4" as hosted on the NVL Pubs website. In comparing Exhibit EX2015 to Exhibit EX2008, it is my determination that Exhibit EX2008 is a true and correct copy of FIPS PUB 186-4 as hosted on the NVL Pubs website. As the Internet Archive first captured this file as of August 9, 2013, it is my determination that FIPS PUB 186-4 was first made available to the public as of August 9, 2013 via the Internet Archive and likely earlier via the original NVL Pubs website.

10. I have reviewed Exhibit EX2009, a document entitled "NIST Special Publication 800-63-2: Electronic Authentication Guideline" by William E. Burr, et al.

11. Attached hereto as Exhibit EX2016 is a screen capture of the Internet Archive Wayback Machine entry for

<http://nvlpubs.nist.gov/nistpubs/SpecialPublications/NIST.SP.800-63-2.pdf>.

I secured these screen captures myself from

<https://web.archive.org/web/20140330034434/http://nvlpubs.nist.gov/nistpubs/SpecialPublications/NIST.SP.800-63-2.pdf>. This record was captured as of March 30, 2014.

12. Exhibit EX2016 is an Internet Archive capture of a file entitled "NIST Special Publication 800-63-2: Electronic Authentication Guideline" by William E. Burr, et al as hosted on the NVL Pubs website. In comparing Exhibit EX2016 to Exhibit EX2009, it is my determination that Exhibit EX2009 is a true and correct copy of NIST Special Publication 800-63-2: Electronic Authentication Guideline by William E. Burr, et al as hosted on the NVL Pubs website. As the Internet Archive first captured this file as of March 30, 2014, it is my determination that NIST Special Publication 800-63-2: Electronic Authentication Guideline by William E. Burr, et al was first made available to the public as of March 30, 2014 via the Internet Archive and likely earlier via the original NVL Pubs website.

13. I have reviewed Exhibit EX2010, a document entitled "Towards Improving Usability of Authentication Systems Using Smartphones for Logical and Physical Resource Access in a Single Sign-On Environment" by G. Carullo,

et al as published in Information Systems: Crossroads for Organization, Management, Accounting and Engineering.

14. Attached hereto as Exhibit EX2017 is a true and correct copy of the MARC record for Information Systems: Crossroads for Organization, Management, Accounting and Engineering as held by the Ohio University Library. I secured this record myself from the library's public catalog. The MARC record contained within Exhibit EX2017 accurately describes the title, publisher and ISBN number of Information Systems: Crossroads for Organization, Management, Accounting and Engineering.

15. The 008 field of the MARC record in Exhibit EX2017 indicates the date of record creation. The 008 field of Exhibit EX2017 indicates the Ohio University Library first acquired Information Systems: Crossroads for Organization, Management, Accounting and Engineering as of June 13, 2012. Considering this information, it is my determination that Information Systems: Crossroads for Organization, Management, Accounting and Engineering and therefore "Towards Improving Usability of Authentication Systems Using Smartphones for Logical and Physical Resource Access in a Single Sign-On Environment" was made available to the public via Ohio University Library shortly after June 13, 2012.

16. Attached hereto as Exhibit EX2018 is a screen capture of the Internet

Archive Wayback Machine entry for

http://www0.cs.ucl.ac.uk/staff/F.Sarro/resource/papers/B2%20e%20C11_CameraReady.pdf. I secured these screen captures myself from

https://web.archive.org/web/20200113202746/http://www0.cs.ucl.ac.uk/staff/F.Sarro/resource/papers/B2%20e%20C11_CameraReady.pdf. This record was captured as of January 13, 2020.

17. Exhibit EX2018 is an Internet Archive capture of a file entitled "Towards

Improving Usability of Authentication Systems Using Smartphones for

Logical and Physical Resource Access in a Single Sign-On Environment" by

G. Carullo, et al as hosted on the University College London website. In

comparing Exhibit EX2018 to Exhibit EX2010, it is my determination that

Exhibit EX2010 is a true and correct copy of Towards Improving Usability

of Authentication Systems Using Smartphones for Logical and Physical

Resource Access in a Single Sign-On Environment by G. Carullo, et al as

hosted on the University College London website. As the Internet Archive

first captured this file as of January 13, 2020, it is my determination that

Towards Improving Usability of Authentication Systems Using

Smartphones for Logical and Physical Resource Access in a Single Sign-On

Environment by G. Carullo, et al was first made available to the public as of January 13, 2020 via the Internet Archive and likely earlier via the original University College London website.

18.I have reviewed Exhibit EX2011, a document entitled "Construction of a Taiwan biodiversity genetic database in cloud environments" by Han-Yu Lin, et al as published in Proceedings of the 2012 International Symposium on Biometrics and Security Technologies.

19.Attached hereto as Exhibit EX2019 is a true and correct copy of the MARC record for Proceedings of the 2012 International Symposium on Biometrics and Security Technologies as held by the Penn State University Library. I secured this record myself from the library's public catalog. The MARC record contained within Exhibit EX2019 accurately describes the title, publisher and ISBN number of Proceedings of the 2012 International Symposium on Biometrics and Security Technologies.

20.Attached hereto as Appendix Exhibit EX2020 is a true and correct copy of "Construction of a Taiwan biodiversity genetic database in cloud environments" as published in Proceedings of the 2012 International Symposium on Biometrics and Security Technologies as held by the Penn

State University Library. This PDF was secured from the library's collection. In comparing Exhibit EX2011 to Exhibit EX2020, it is my determination that Exhibit EX2011 is a true and correct copy of "Construction of a Taiwan biodiversity genetic database in cloud environments" by Han-Yu Lin, et al as published in Proceedings of the 2012 International Symposium on Biometrics and Security Technologies.

21. The 008 field of the MARC record in Exhibit EX2019 indicates the date of record creation. The 008 field of Exhibit EX2019 indicates the Penn State University Library first acquired Proceedings of the 2012 International Symposium on Biometrics and Security Technologies as of January 6, 2012. Considering this information, it is my determination that Proceedings of the 2012 International Symposium on Biometrics and Security Technologies and therefore "Construction of a Taiwan biodiversity genetic database in cloud environments" was made available to the public shortly after January 6, 2012.

22. I have reviewed Exhibit EX2012, a document entitled "Wireless Network Security: Design Considerations for an Enterprise Network" by Khoon Wee Oh.

23. Attached hereto as Exhibit EX2021 is a screen capture of a PDF entitled "Wireless Network Security: Design Considerations for an Enterprise Network" as hosted on the Calhoun DSpace Repository website. I secured these screen captures myself from <https://calhoun.nps.edu/entities/publication/afc87d79-8370-45b9-b8f6-c30859026220>. In comparing Exhibit EX2021 to Exhibit EX2012, it is my determination that Exhibit EX2012 is a true and correct copy of Wireless Network Security: Design Considerations for an Enterprise Network by Khoon Wee Oh. The 'Date of Issue' and 'Date' fields of the thesis repository record captured in Exhibit EX2021 indicate Wireless Network Security: Design Considerations for an Enterprise Network by Khoon Wee Oh was first approved for public release as of December 2004.

24. Attached hereto as Appendix Exhibit EX2022 is a screen capture of a webpage entitled "Wireless Network Security: Design Considerations for an Enterprise Network" as hosted on the Internet Archive website. I secured these screen captures myself from <https://archive.org/details/wirelessnetworks109451246/page/n1/mode/2up>. The 'Addeddate' field present on page 1 of Appendix OH02 indicates Wireless Network Security: Design Considerations for an Enterprise

Network by Khoon Wee Oh was made available to the public certainly no later than May 3, 2019.

25. I have reviewed Exhibit EX2013, a document entitled "On the Evolution of User Authentication: Non-bilateral Factors" by Moti Yung as published in Lecture Notes in Computer Science August 2008.

26. Attached hereto as Exhibit EX2023 is a true and correct copy of the MARC record for Lecture Notes in Computer Science as held by the Penn State University Library. I secured this record myself from the library's public catalog. The MARC record contained within Exhibit EX2023 accurately describes the title, publisher and ISSN number of Lecture Notes in Computer Science. The Showing Results field present on page 3 of this record indicates the library's collection includes the August 2008 issue of Lecture Notes in Computer Science containing "On the Evolution of User Authentication: Non-bilateral Factors".

27. Attached hereto as Exhibit EX2024 is a true and correct copy of "On the Evolution of User Authentication: Non-bilateral Factors" as published in Lecture Notes in Computer Science as held by the Penn State University Library. This PDF was secured from the library's collection. In comparing

Exhibit EX2013 to Exhibit EX2024, it is my determination that Exhibit EX2013 is a true and correct copy of "Cryptanalysis of the SFLASH Signature Scheme" by Moti Yung, et al as published in Lecture Notes in Computer Science.

28. The 008 field of the MARC record in Exhibit EX2023 indicates the date of record creation. The 008 field of Exhibit EX2023 indicates the Penn State University Library first acquired Lecture Notes in Computer Science as of September 22, 2006 and held the journal in perpetuity until the publication of "On the Evolution of User Authentication: Non-bilateral Factors". Considering this information, it is my determination that Lecture Notes in Computer Science August 2008 and therefore "On the Evolution of User Authentication: Non-bilateral Factors" was made available to the public shortly after its initial publication in August 2008.

29. I have been retained on behalf of the Patent Owner to provide assistance in the above-illustrated matter in establishing the authenticity and public availability of the documents discussed in this declaration. I am being compensated for my services in this matter at the rate of \$200.00 per hour plus reasonable expenses. My statements are objective, and my compensation does not depend on the outcome of this matter.

30.I understand that this declaration will be filed as evidence in a contested case before the Patent Trial and Appeal Board of the U.S. Patent and Trademark Office. I acknowledge that I may be subject to cross-examination via deposition in the case and that any such cross-examination will take place within the United States. If cross-examination is required of me, I will appear for cross-examination within the United States during the time allotted for cross examination.

31.I declare under penalty of perjury that the foregoing is true and correct. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code.

Dated: 6/22/2026

A handwritten signature in black ink, appearing to read 'June Ann Munford', with a stylized flourish at the end.

June Ann Munford