

DECLARATION OF ILONA M. WHEAT

1. My name is Ilona M. Wheat. I am an attorney at Sheppard Mullin Richter and Hampton LLP, counsel for Motorola Mobility LLC. If called as a witness, I could and would competently testify to all facts within my personal knowledge except where stated upon information and belief.
2. On or about October 9, 2019, I reviewed the textbook *Fundamentals of Analog and Digital Communication Systems* by Richard S. Simpson and Ronald C. Houts (herein “Simpson”). From my review of Simpson, I determined that Simpson includes a copyright notice of 1971 and that its Library of Congress Catalog Card Number is 78-154683.
3. Exhibit 1035 is a true and correct copy of Simpson’s title page, and its pages 346 and 347.
4. I also determined that Simpson was listed in the Library of Congress Online Catalog database, found at https://catalog.loc.gov/vwebv/ui/en_US/htdocs/help/searchBrowse.html.
5. Exhibit 1036 is a true and correct copy of Simpson at the Library of Congress Online Catalog.
6. On the same day, I determined that Simpson, was listed on WorldCat Online Library Catalog database, found at www.worldcat.org.
7. Exhibit 1037 is a true and correct copy of the WorldCat database at https://www.worldcat.org/title/fundamentals-of-analog-and-digital-communication-systems/oclc/641261738&referer=brief_results, last visited on October 9, 2019.
8. WorldCat Library indicated Simpson is available at least at the following Libraries:

- University of Maryland, College Park, Science, Technology, Engineering, and Mathematics Library, otherwise known as University of Maryland STEM Library, located at 4176 College Park, Maryland 20742, United States. *Id.* at 1;
- Case Western Reserve University Kelvin Smith Library, located at 11055 Euclid Ave, Cleveland, Ohio, United States. *Id.* at 2;
- Brown University Library, located at 2911 Woodside Drive, 44106, Providence, Rhode Island 02912, United States. *Id.*;
- University of Cincinnati, Main Campus, Walter C. Langsam Library, located at 366 W. Circle Drive, Cincinnati, Ohio 45221, United States. *Id.* at 3; and
- Michigan State University Library, Remote Storage, located at 2911 Woodside Drive, East Lansing, Michigan 48824, United States. *Id.*

9. On the same day, I also researched the *MARC 21 Reference Materials* found at <https://www.loc.gov/marc/umb/um07to10.html#part10>. The MARC 21 formats are standards for the representation and communication of bibliographic and related information in machine-readable form. See <https://www.loc.gov/marc/96princip.html>. I determined that the first six digits of MARC 21 field 008 indicate the date a record was entered on file by a particular library. Exhibit 1038 is a true and correct copy of *Part X: Field 008 for Books of the MARC 21 Reference Materials*.

University of Maryland

10. On October 9, 2019, I performed a search on the University of Maryland Library website at <https://www.lib.umd.edu/>. I found Simpson at https://catalog.umd.edu/F/?func=full-set-set&set_number=991271&set_entry=000001&format=999. I selected the “MARC tags” display at the top right of this page to view the cataloging details for the

publication. According to the University of Maryland Library's website, the date Simpson was entered on file is July 16, 1971.

11. Exhibit 1039 is a true and correct copy of a screenshot of University of Maryland Library's Full View of Record for Simpson, with the relevant portions highlighted, showing the date when it was cataloged.

Case Western Reserve University

12. On October 9, 2019, I performed a search on the Case Western Reserve University Library's website at <http://catalog.case.edu/>. I found Simpson at <http://catalog.case.edu/search?/o150192/o150192/1%2C4%2C4%2CE/frameset&FF=o150192&1%2C1%2C>. I clicked on "MARC Display" button at the top of this page to view the cataloging details for the publication. According to the Case Western Reserve University Library's website, the date Simpson was entered on file is July 16, 1971.
13. Exhibit 1040 is a true and correct copy of a screenshot of Case Western Reserve University Library's MARC Display view of Simpson, with the relevant portions highlighted, showing the date when it was cataloged.

Brown University

14. On October 9, 2019, I performed a search on the Brown University Library website at <http://josiah.brown.edu/>. I found Simpson at <http://josiah.brown.edu/search~S7/o?SEARCH=ocm00150192>. I clicked on "Coded Display" button at the top of this page to view the cataloging details for the publication. According to the Brown University Library's website, the date Simpson was entered on file is July 16, 1971.

15. Exhibit 1041 is a true and correct copy of a screenshot of Brown University Library's Coded Display view of Simpson, with the relevant portions highlighted, showing the date when it was cataloged.

University of Cincinnati

16. On October 9, 2019, I performed a search on the University of Cincinnati Library website at <http://uclid.uc.edu/search/X>. I found Simpson at [http://uclid.uc.edu/search/X?SEARCH=t:\(Fundamentals%20of%20Analog%20and%20Digital%20Communication%20Systems\)%20and%20a:\(simpson\)&searchscope=39&SORT=D](http://uclid.uc.edu/search/X?SEARCH=t:(Fundamentals%20of%20Analog%20and%20Digital%20Communication%20Systems)%20and%20a:(simpson)&searchscope=39&SORT=D). I clicked on "MARC Display" button at the top of this page to view the cataloging details for the publication. According to the University of Cincinnati Library's website, the date Simpson was entered on file is July 16, 1971.
17. Exhibit 1042 is a true and correct copy of a screenshot of University of Cincinnati Library's MARC Display view of Simpson, with the relevant portions highlighted, showing the date when it was cataloged.

Michigan State University

18. On October 9, 2019, I performed a search on the Michigan State University Library website at <https://lib.msu.edu/>. I found Simpson at <http://catalog.lib.msu.edu/record=b1336779~S39a>. I clicked on "MARC Display" button at the top of this page to view the cataloging details for the publication. According to the Michigan State University Library's website, the date Simpson was entered on file is July 16, 1971.

19. Exhibit 1043 is a true and correct copy of a screenshot of Michigan State University Library's MARC Display view of Simpson, with the relevant portions highlighted, showing the date when it was cataloged.
20. On or about October 9, 2019, I reviewed the textbook *Detection, Estimation, and modulation theory Part 1*, by Harry L Van Trees; Kristine L Bell; Zhi Tian (herein "Van Trees").
21. On the same date, I determined that Van Trees includes a copyright notice date of 1968 and that its Library of Congress Catalog Card Number is 67-23331.
22. Exhibit 1044 is a true and correct copy of the title page of Van Trees.
23. I also determined that Van Trees was listed in the Library of Congress Online Catalog database, found at https://catalog.loc.gov/vwebv/ui/en_US/htdocs/help/searchBrowse.html.
24. Exhibit 1045 is a true and correct copy of Van Trees at the Library of Congress Online Catalog.
25. On the same day, I determined that Van Trees, was listed on WorldCat Online Library Catalog database, found at www.worldcat.org.
26. Exhibit 1046 is a true and correct copy of the WorldCat database at https://www.worldcat.org/title/detection-estimation-and-modulation-theory-part-1-detection-estimation-and-linear-modulation-theory/oclc/220110217&referer=brief_results, last visited on October 9, 2019.
27. WorldCat Library indicated Van Trees is available at least at the following Libraries:
 - George Mason University Fenwick Library, located at 4400 University Dr, Fairfax, Virginia 22030 United States. *Id.* at 1;

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