

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

NOKIA OF AMERICA CORPORATION, ERICSSON INC., AND T-MOBILE
USA, INC.
Petitioners

v.

GENERAL ACCESS SOLUTIONS, LTD.,
Patent Owner

Case No. IPR2023-01416

U.S. Patent No. 6,947,477

SUPPLEMENTAL DECLARATION OF DANIEL VAN DER WEIDE, Ph.D.

TABLE OF CONTENTS

I. INTRODUCTION.....	3
II. QUALIFICATIONS	4
III. PUBLIC AVAILABILITY OF EXHIBIT 1006	4
IV. REFERENCES AND INCORPORATIONS OF WIMAX	5
V. CONCLUSION.....	9

I. INTRODUCTION

1. I have been retained as a technical expert by counsel for Petitioners Nokia of America Corporation (“Nokia”), Ericsson Inc. (“Ericsson”), and T-Mobile USA, Inc. (“T-Mobile”) to address certain issues regarding U.S. Patent No. 6,794,477 (“the ’477 Patent”).

2. I have personal knowledge of the facts contained in this Declaration, am of legal age, and am otherwise competent to testify.

3. Unless otherwise stated, the matters contained in this Declaration are of my own personal knowledge and, if called as a witness, I could and would testify completely and truthfully with regard to the matters set forth herein.

4. My opinions are based on my years of education, research, and experience, as well as my study of the relevant materials. A list of materials I considered is included at the beginning of this Declaration.

5. I reserve all available rights to supplement this Declaration if further information becomes available, or if I am asked to consider additional information. This Declaration represents only those opinions I have formed to date.

6. Further, I reserve all available rights to consider and comment on any additional expert statements or testimony of Patent Owner’s expert(s) in this matter.

7. I am being compensated at my current consulting rate of \$750 per hour for my time spent working on issues in this matter. My compensation does not depend on the outcome of this matter or the opinions I express.

II. QUALIFICATIONS

8. I hereby incorporate my Qualifications sections from my Declaration filed with the original Petition for *Inter Partes* Review on October 13, 2023. Ex. 1003.

III. PUBLIC AVAILABILITY OF EXHIBIT 1006

9. Exhibit 1006 is a true and correct copy of the IEEE 802.16.1 Draft Standard, “Air Interface for Fixed Broadband Wireless Access Systems” (“WiMAX”). The header on the first page of Ex. 1006 states “IEEE 802.16.1-00/01r4, September 2000” and, at the bottom of that same page, states “Published August 2000.” Ex. 1006.000001.

10. As I discussed in my Declaration filed with the original Petition, WiMAX qualifies as prior art under at least pre-AIA §102(a). Ex. 1003 at ¶54. I addressed, in paragraphs 54-55 of Ex. 1003, the reasons supporting my finding that WiMAX was publicly available as of the alleged priority date of the ’477 Patent. *Id.* at ¶54-55.

11. I understand from Counsel that the Board requested additional clarification as to the public availability of WiMAX. To further establish WiMAX’s

position as prior art, this declaration discusses additional patents and patent applications that reference or incorporate WiMAX that were filed prior to the '477 Patent's alleged priority date. Reference to WiMAX in these patents and publications is consistent with my recollection of the publicly available nature of WiMAX at the time. Each of these references showcases that WiMAX was published to the public and readily available to persons of skill in the art. I discuss each of these references in turn below.

IV. REFERENCES AND INCORPORATIONS OF WIMAX

12. Each of the patent applications I discuss below are generally related to the same field of technology as the '477 Patent, specifically transmission of signals in a wireless access system.

13. U.S. Patent Application Publication No. 2002/0051435 ("Giallorenzi"), entitled "Two-Dimensional Channel Bonding in a Hybrid CDMA/FDMA Fixed Wireless Access System to Provide Finely Variable Rate Channels," claims priority to two provisional applications filed on October 27, 2000. Ex. 1017.000001. The provisional applications to which Giallorenzi claims priority were filed after the publication of WiMAX in September 2000, but prior to the alleged priority date of the '477 Patent. *Id.*

14. Paragraph [0069] of Giallorenzi references WiMAX. Giallorenzi states: "[t]he presently preferred PHY is quite different from cable modem and xDSL

industry standards, as well as existing IEEE 802.11 standards. However, with a spreading factor of one chip/symbol, the PHY supports a single-carrier QAM waveform similar to DOCSIS 1.1 and IEEE 802.16.1 SP-RF1v1.1-I05-000714, and ***IEEE 802.16.1-00/0r4, 'Air Interface for Fixed Broadband Wireless Access Systems', September 2000.***” Ex. 1017.000011 (emphasis added).

15. Ex. 1018 is one of the provisional applications (60/243,980) to which Giallorenzi claims priority. Ex. 1018 was filed on October 27, 2000. The paragraph quoted above can be found on page 19 of the as-filed provisional application. Ex. 1018.000019. Ex. 1018 confirms that WiMAX was publicly accessible to POSITAs by October 27, 2000 and before the alleged priority date of the '477 Patent.

16. Ex. 1019 is the second provisional application (60/243,972) to which Giallorenzi claims priority. Ex. 1019 was also filed on October 27, 2000. Ex 1019 also contains the quote: “[t]he presently preferred PHY is quite different from cable modem and xDSL industry standards, as well as existing IEEE 802.11 standards. However, with a spreading factor of one chip/symbol, the PHY supports a single-carrier QAM waveform similar to DOCSIS 1.1 and IEEE 802.16.1 SP-RF1v1.1-I05-000714, and ***IEEE 802.16.1-00/0r4, 'Air Interface for Fixed Broadband Wireless Access Systems', September 2000.***” Ex. 1019.000019 (emphasis added). Ex. 1019 confirms that WiMAX was publicly accessible to POSITAs by October 27, 2000 and before the alleged priority date of the '477 Patent.

17. U.S. Patent Application Publication No. 2002/0071384 (“Hall”), entitled “Hybrid Synchronous Space/Code Multiple Access System Using an Adaptive Antenna System,” claims priority to another provisional application (60/243,808) filed on October 27, 2000. Ex. 1020.000006. The provisional application to which Hall claims priority was filed after the publication of WiMAX in September 2000, but prior to the alleged priority date of the ’477 Patent. *Id.*

18. Paragraph [0074] of Hall references WiMAX. Hall states: “[t]he presently preferred PHY is quite different from cable modem and xDSL industry standards, as well as existing IEEE 802.11 standards. However, with a spreading factor of one chip/symbol, the PHY supports a single-carrier QAM waveform similar to DOCSIS 1.1 and IEEE 802.16.1 draft PHY (see ‘data-Over-Cable Service Interface Specifications: Radio Frequency Interface Specification,’ and *IEEE 802.16.1-00/0r4, ‘Air Interface for Fixed Broadband Wireless Access Systems’, September 2000.*” Ex. 1020.000012 (emphasis added).

19. Ex. 1021 is provisional application (60/243,808) to which Hall claims priority. Ex. 1021 was filed on October 27, 2000. The paragraph quoted above can be found on page 18 of the as-filed provisional application. Ex. 1021.000018. Ex. 1021 confirms that WiMAX was publicly accessible to POSITAs by October 27, 2000 and before the alleged priority date of the ’477 Patent.

20. U.S. Patent Application Publication No. 2002/0051462 (“Ertel”), entitled “Bandwidth Allocation and Data Multiplexing Scheme for Direct Sequence CDMA Systems,” claims priority to a provisional application (60/243,807) filed on October 27, 2000. Ex. 1022.000006. The provisional application to which Ertel claims priority was filed after the publication of WiMAX in September 2000, but prior to the alleged priority date of the ’477 Patent. *Id.*

21. Paragraph [0065] of Ertel references WiMAX. Ertel states: “[t]he presently preferred PHY is quite different from cable modem and xDSL industry standards, as well as existing IEEE 802.11 standards. However, with a spreading factor of one chip/symbol, the PHY supports a single-carrier QAM waveform similar to DOCSIS 1.1 and IEEE 802.16.1 draft PHY (see ‘data-Over-Cable Service Interface Specifications: Radio Frequency Interface Specification,’ and ***IEEE 802.16.1-00/0r4, ‘Air Interface for Fixed Broadband Wireless Access Systems’, September 2000.***” Ex. 1022.000012 (emphasis added).

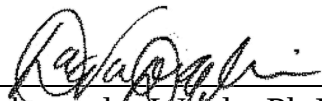
22. Ex. 1023 is provisional application (60/243,807) to which Ertel claims priority. Ex. 1023 was filed on October 27, 2000. The paragraph quoted above can be found on page 19 of the as-filed provisional application. Ex. 1023.000019. Ex. 1023 confirms that WiMAX was publicly accessible to POSITAs by October 27, 2000 and before the alleged priority date of the ’477 Patent.

23. As shown above, multiple patent applications filed in October 2000 reference WiMAX. These publications confirm that WiMAX was publicly accessible before the '477 Patent's alleged priority date and indeed was referenced and incorporated in patent applications dated well before the '477 Patent's alleged priority date, and therefore WiMAX qualifies as prior art under § 102(a).

V. CONCLUSION

I 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 that these statements were made with 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: May 14, 2024



Daniel van der Weide, Ph.D.