

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

**SAMSUNG ELECTRONICS CO., LTD. AND
SAMSUNG ELECTRONICS AMERICA, INC.,**
Petitioners

v.

MAXELL CORPORATION,
Patent Owner

Inter Partes Review: IPR2025-01309

**SUPPLEMENTAL DECLARATION OF DR. R. JACOB BAKER IN
SUPPORT OF PETITIONERS' REPLY FOR INTER PARTES REVIEW OF
U.S. PATENT NO. 7,577,417**

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I. INTRODUCTION

I, R. Jacob Baker, declare as follows:

1. My name is R. Jacob Baker, Ph.D., P.E. I have been asked by Petitioners Samsung Electronics Co., Ltd. and Samsung Electronics America, Inc. to provide my expert opinions in support of the above-identified petition for inter partes review of claims 1-7 (“Challenged Claims”) of U.S. Patent No. 7,577,417 (“’417 patent,” EX1001), owned by Maxell Corporation (“PO”), and Petitioners’ Reply regarding the same.

2. I currently hold the opinions set forth in this declaration, which are directly responsive to the arguments and opinions provided by Dr. Brogioli.

3. I am being compensated for my time at the rate of \$765 per hour. This compensation is not contingent upon my performance, the outcome of this matter, or any issues involved in or related to this matter.

II. BACKGROUND AND QUALIFICATIONS

A. Background

4. I incorporate by reference the Background and Qualifications Section (Section II *et seq.*) of my Opening Declaration (EX1003), including my CV.

III. DOCUMENTS AND OTHER MATERIALS RELIED UPON

5. In forming the opinions set forth in this declaration, I have reviewed the documents identified in my Opening Declaration (*see* Section III) in addition to the materials identified in the following table:

Exhibit No.	Description
1028	Certified Translation of Japanese Patent Application Publication No. H09-26832A (“Kitazawa”).
1030	Deposition Transcript of Dr. Brogioli, dated July 24, 2026
1031	Hargrave’s Communications Dictionary Excerpts
1032	McGraw-Hill Dictionary of Electrical and Computer Engineering Excerpts
2030	Declaration of Dr. Brogioli in Support of Patent Owner’s Response

6. Additionally, I have utilized my own experience and expertise, including regarding the knowledge and capabilities of a person of ordinary skill in the relevant art in the timeframe of the claimed priority date of the ’417 patent.

IV. RELEVANT PATENT LAW AND LEGAL STANDARDS

7. As explained in my Opening Declaration, I have been asked to use the date of the filing of the earliest application to which priority is claimed (i.e., April 3, 2002) as the date of invention for purposes of my analysis.

8. I hereby incorporate by reference the Relevant Patent Law and Legal Standards Section in my Opening Declaration.

V. LEVEL OF ORDINARY SKILL IN THE ART

9. I hereby incorporate by reference the Level of Ordinary Skill in the Art Section in my Opening Declaration.

VI. THE ’417 PATENT AND ITS PROSECUTION HISTORY

10. I hereby incorporate by reference the Overview of the ’417 Patent and its Prosecution History Section in my Opening Declaration.

VII. CLAIM CONSTRUCTION

A. Mobile Terminal

11. I understand that Dr. Brogioli's declaration argues that the term "mobile terminal" should be narrowly construed to mean "cellular phones, not laptop computers." EX2020, ¶¶5, 26. I disagree.

12. "Mobile terminal" is a well-known term in the art that a POSITA would have understood at the time of the invention to encompass portable devices used for data input and/or output. Examples of portable devices that were used for data input and/or output at the time of the '417 patent include hand-held devices, laptops, cellular phones, and tablets.

13. This understanding comports with how technical dictionaries defined "terminal." For example, Hargrave's Communications Dictionary defines "terminal" as "a device used for data input and/or output" (EX1031) and McGraw-Hill's Dictionary of Electrical and Computer Engineering defines "terminal" as "a site or location at which data can enter or leave a system" (EX1032).

14. I understand that claim terms are presumed to have their plain and ordinary meaning. That presumption, however, may be overcome, for example, when there is a showing that the patentee acted as a lexicographer and defined a claim term, or when an applicant clearly and unmistakably disclaims claimed subject matter encompassed by a claim term during prosecution.

15. As explained below, based on my review of the intrinsic record, there is no basis to limit “mobile terminal” to only a “cellular phone.”

16. To start, the title, Summary of the Invention, and claims of the ’417 patent refer to “mobile terminal,” generally, and not to a cellular phone. In addition, the ’417 patent does not explicitly define “mobile terminal” as a “cellular phone.” *See generally* EX1001. The patent likewise does not expressly state that “laptop computers” are not a “mobile terminal.” *Id.* At most the ’417 patent states “[t]he present invention relates to a cellular phone comprising a central processing unit (CPU)” —but that the invention may “relate[]” to a cellular phone would not be understood by a POSITA that the disclosed invention is a cellular phone or limited to cell phones.

17. Like the specification, the prosecution history also does not directly address, either explicitly or implicitly, the meaning of “mobile terminal.” Therefore, the patentee made no clear and unmistakable statement during prosecution regarding “mobile terminal.”

18. I note that Dr. Brogioli has no opinion—and therefore does not dispute—that there is no explicit definition in the specification or disclaimer in the prosecution history that justifies limiting “mobile terminal” to something other than its plain and ordinary meaning.

19. I understand, however, that Dr. Brogioli's opinion that "mobile terminal" should be construed as "cellular phones, not laptop computers" is based on the notion that because the patent repeatedly refers to a cellular phone, interpreting "mobile terminal" as another type of device (e.g., a laptop) would be inconsistent with the specification. I disagree.

20. Critically, the specification expressly provides that "a hand-held terminal or mobile terminal, for switching the frequency of a clock signal delivered from the side of an application program, is disclosed in JP-A NO. 73237/1999 (Heisei 11)." EX1001, 1:17-20 (emphasis added). The relevance and importance of this intrinsic evidence regarding the proper meaning of "mobile terminal" is undeniable as it is the only disclosure in the '417 patent that specifically provides an example of what the patent refers to as a "mobile terminal." *See generally* EX1001 (the claim term, "mobile terminal," does not appear alongside any reference to a "cellular phone"). Notably, JP-73237/1999 describes a handheld portable terminal device having an input unit for entering data, a display unit, and an optical reading unit like a barcode reader for storing data into internal memory, among other components that I understand Dr. Brogioli argues are not typically found in cellular phones. EX1028, ¶¶[0003], [0015], [0025]-[0032] (discussing the components in the mobile terminal of Figs. 1 & 3), Fig. 1 (keyboard 43, display/video controller 48, PC card slots, integrated printer, IR controller,) and Fig. 3 (modem); EX2020, ¶41 (Dr.

Brogioli opining that hard disk drives, floppy disk drives, video controllers, modem and other peripherals were “not found in a cellular phone”). JP-73237/1999 also discloses transferring the stored data to a host computer. EX1028, [0015]. And at no point does JP-73237/1999 use the words “cellular phone.” Nor is there anything in JP-73237/1999 that would indicate to a POSITA that the device is a cellular phone. Critically, there is no mention of any ability to connect the device to a cellular network, let alone handle telephone calls.

21. Accordingly, the mobile terminal in JP-73237/1999 is clearly inconsistent with what Dr. Brogioli argues is a “cellular phone” that is described in the ’417 patent. Therefore, given the ’417 patent’s reference to JP-73237/1999 as disclosing a mobile terminal, the ’417 patent does not refer to a mobile terminal as only a cellular phone. Accordingly, the plain and ordinary meaning of “mobile terminal,” which as I note above includes cellular phones (and other devices like laptop computers), is consistent with the specification.

22. Lastly, I am informed that PO also accuses tablets of infringing the ’417 patent in the co-pending District Court litigation. However, a POSITA would have known that tablets are not “cellular phones,” especially not as described in the ’417 patent. Regardless, I understand that PO argues the accused tablets are cellular phones because they can make calls, send messages, and connect to LTE and/or Wi-Fi networks to provide cellular phone functionalities. But this logic

supports my opinion since anyone familiar with laptop computers knows they also have these functionalities. And as explained in my Opening Declaration, the laptop computer in Belt (what I understand Dr. Brogioli argues is not a mobile terminal) includes a modem for receiving incoming telephone calls. EX1004, 5:15-21, Fig. 1b. Similarly, Foster's laptop computer includes a modem (waking up in response to interrupt events from serial or modem ports, processing incoming characters from telephone lines). EX1005, 21:9-18, 32:21-25, 60:10-20. Therefore, the ability of a device to make calls and send messages does not by itself make it a cellular phone, especially tablets that lack the ability to connect to a cellular network.

B. There Is Motivation to Combine Belt and Foster

23. I understand the Dr. Brogioli argues, in part, that there would be no motivation to combine Belt and Foster because the “power management concerns and constraints of laptop computers are fundamentally different from those of cellular phones” and “[l]aptop computers must manage power to [a] wide array of peripheral subsystems whereas “the '417 Patent is directed to a cellular phone in which the primary power management challenge is controlling the clock frequency of the central processing unit to balance speed against current consumption from a small battery.” EX2020, ¶42. I disagree.

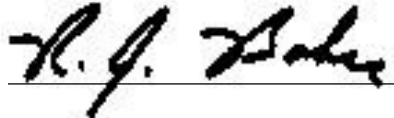
24. Even if laptops may have been known to additionally manage power delivery to peripheral subsystems, laptops were also known to be capable of changing the processor's clock to balance processing speed with battery power consumption. This is expressly taught by Belt and Foster, independent of any peripheral subsystem-based power management. EX1004, 3:5-14 (lowering processor clocks to save power); EX1005, 19:9-11 (same). Likewise, the ACPI specification that Dr. Brogioli relies on discloses that an aspect of "managing the processor's performance [and] power consumption" is "processor clock throttling." EX2024 (ACPI rev. 2), 225. Specifically, "[w]hile in the C0 state [(e.g., the operating or working state)], ACPI allows the performance of the processor to be altered through a defined—throttling process (the C0 Throttling state in the diagram below). Throttling hardware lets the processor execute at a designated performance level relative to its maximum performance. The hardware to enter throttling is also described in this section. in which the processor's clock can be lowered." EX2023 (ACPI rev. 1), 68. Thus, a POSITA would have understood that the processor-level power management techniques disclosed in Belt and Foster (and ACPI) would apply to the type of processors found in cellular phones. Indeed, I note that Dr. Brogioli does not dispute that a POSITA would have understood that "similar [laptop power management] software architectures and mechanisms" like those described in the ACPI specification (EX2020, ¶56), "could be used [in

cellular phones].” EX1030, 207:5-17. Thus, it is my opinion that a POSITA would have also understood that Belt and Foster’s processor-based power management techniques, even though they are discussed in the context of laptops, apply equally to the ’417 patent (in the event mobile terminal is limited to cellular phone).

VIII. CONCLUSION

25. I hereby declare under penalty of perjury under the laws of the United States of America that the following is true and correct, and that all statements made of my own knowledge are true and that all statements made on information and belief are believed to be true. I understand that willful false statements are punishable by fine or imprisonment or both under Section 1001 of Title 18 of the United States Code.

Date: August 3, 2026



Dr. R. Jacob Baker