

EXHIBIT 12

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
TEXARKANA DIVISION**

MAXELL, LTD.,

Plaintiff,

vs.

APPLE INC.,

Defendant.

Civil Action No. 5:19-cv-00036-RWS

**DECLARATION OF DR. JOSEPH A. PARADISO IN SUPPORT OF
APPLE INC.'S PROPOSED CLAIM CONSTRUCTIONS**

some means of indoor location determination, likely an infrared sensor, would be required to cover as many potential use scenarios as possible. Extrinsic evidence confirms that a POSITA at the time of the alleged invention would have known that an infrared ray sensor was commonly used, in conjunction with GPS, to obtain location information. Specifically, those skilled in the art understood that infrared ray sensors were especially adept at determining location when a walking user is indoors. *See, e.g.:*

- Starner at 1-2 (noting that radio frequencies used for GPS at that time prevented GPS from being effective indoors and proposing a solution that incorporates the use of a system of infrared receivers and transmitters);
- Abowd at 8-9 (noting the same problem and proposing as a solution the use of infrared receivers tuned to the same frequency as intermittently placed infrared beacons); and
- Marmasse, “comMotion: a context-aware communication system,” Mass. Inst. of Tech. (Sept. 1999) (noting the use of infrared receivers and transmitters for “interior location sensing”).

32. I have also been informed that the Patent Trial and Appeal Board adopted in IPR2019-00071 (*ASUSTek Computer Inc., et al. v. Maxell, Ltd.*) the construction that Apple now proposes. There, the Petitioner ASUSTek proposed the same construction offered by Apple here, and Maxell did not dispute it. The PTAB noted that the construction was “supported by the cited portions of the Specification of the ’498 patent” (IPR2019-00071, Paper No. 7 at 9) which were also excerpted above.

33. I therefore agree with Apple’s proposed construction because it reflects the understanding of a POSITA as of the priority date of the Asserted Navigation Patents: July 12, 1999.

34. I am further informed that Maxell agrees that this term should be construed in means-plus-function format, but contends that the function should be “getting location information denoting a present place of said portable terminal” and that the corresponding structure is “a wireless or cellular antenna, a GPS, a PHS, or the like; such a data receiver as an