

## THE U.S. COURT OF APPEALS FOR THE FEDERAL CIRCUIT REQUIRES A SPECIFIC ORDER IN THE OPERATION OF A CLAIMED DEVICE

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In January 8, 2016, the U.S. Court of Appeals for the Federal Circuit (CAFC) decided the case of *Wi-LAN, Inc. v. Apple, Inc.* where Wi-LAN, owner of U.S. Patent No. RE37,802, sued Apple for infringing certain claims of its '802 patent. A jury found that Apple did not infringe and that the claims are invalid. Because the issue of invalidity was directed to a mere procedural matter on appeal, this Newsletter limits its discussions on the issue of infringement.

Claim 1 of the '802 patent recites as follows:

1. A transceiver for transmitting a first stream of data symbols, the transceiver comprising:
  - a converter for converting the first stream of data symbols into plural sets of N data symbols each;
  - first computing means for operating on the plural sets of N data symbols to produce modulated data symbols corresponding to an invertible randomized spreading of the first stream of data symbols; and
  - means to combine the modulated data symbols for transmission.

Emphasis added. In support of the claimed limitations, the specification describes a computing means 12 and a combiner 14 in first and second embodiments corresponding to Figure 1 and Figure 4, respectively, as shown below:

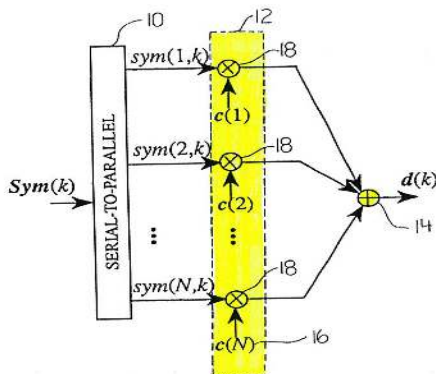


FIGURE 1

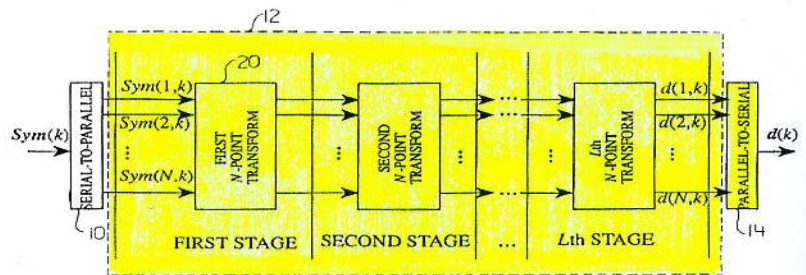


FIGURE 4

At the district court, the parties agreed that Apple's products randomize data symbols after combining them. Apple's basic argument is that it did not infringe because Wi-LAN's claim 1 requires randomizing data symbols before combining them. That is, Apple argued that Wi-LAN's data symbols to be combined must have already been randomized because "the modulated data symbols" to be combined by the claimed converter in claim 1 refers back to the earlier recited "modulated data symbols corresponding to an invertible randomized spreading." In other words, according to Apple, its products function in the "reverse order" in relation to Wi-LAN's transceiver.

The district court agreed with Apple's argument of non-infringement, and "held that the ordering requirement was consistent with the court's claim constructions [or interpretations] and that a reasonable jury could have found non-infringement under those constructions."

On appeal, Wi-LAN argued the following points: (1) "the district court expressly rejected the ordering requirement at claim construction when it refused to construe 'modulated data symbols' as necessarily randomized;" (2) "the ordering requirement is inconsistent with dependent 4, which Wi-LAN contends places the 'means to combine' between the spreading and the randomizing steps;" and (3) even with the ordering requirement, "structure that performs these steps in the reverse order nevertheless infringes under the doctrine of equivalents because the resulting output of the two orderings is mathematically identical."

The CAFC disagreed with Wi-LAN's arguments on all three points. *First*, according to the CAFC, the district court did not explicitly reject the ordering requirement at claim construction, and only rejected Apple's argument that "modulated data symbols" must necessarily refer to randomized data symbols. In this case, "the modulated data symbols" refer back to already-randomized symbols; thus, the claims impose the ordering requirement. *Second*, contrary to Wi-LAN's position, claim 4 is not inconsistent with the ordering requirement because claim 4 merely recites additional elements (i.e., a transformer to spread the symbols, and a means to combine the symbols) that make up the claimed first computing means. *Third*, under the doctrine of equivalents, "[a]n element in the accused product is equivalent to a claimed element if the difference between the two elements are 'insubstantial' to one of ordinary skill in the art." With respect to Wi-LAN's argument that Apple's structure that functions in the reverse order in relation to Wi-LAN's claims nevertheless outputs mathematically identical results, the CAFC found it reasonable for the jury to believe Apple's expert testimony that Apple's savings of "20 out of a few hundred transistors" is a "big deal in wireless communications;" and therefore, "a person of ordinary skill would have found the design differences not insubstantial." That is, Apple's devices that function in the reverse order are not equivalent to Wi-LAN's claimed transceiver.

**Decision:** The district court's denial of Wi-LAN's motions for judgment as a matter of law (JMOL) and for a new trial with respect to non-infringement is AFFIRMED in favor of Apple.

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