

UNITED STATES DISTRICT COURT FOR THE  
NORTHERN DISTRICT OF ILLINOIS  
EASTERN DIVISION

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APPLE INC. and NeXT SOFTWARE	)	
INC. (f/k/a NeXT COMPUTER, INC.),	)	
	)	
<i>Plaintiffs,</i>	)	No. 1:11-cv-08540
	)	
v.	)	
	)	Judge Richard A. Posner.
MOTOROLA, INC. and MOTOROLA	)	
MOBILITY, INC.,	)	
	)	
<i>Defendants.</i>	)	

**ORDER OF JUNE 5, 2012**

**1. Apple’s motion for summary judgment of noninfringement of claim 5 of U.S. Patent No. 6,175,559 is granted [dkt. 964].**

Claim 5 of ‘559 reads in relevant part:

A method for generating preamble sequences in a CDMA system, the method comprising the steps of:

- [1] forming an outer code ...
- [2] forming an inner code ...
- [3] multiplying the outer code by the inner code to generate a preamble sequence.

On May 20 I interpreted this claim language to mean that “step 3 of ‘559 claim 5 occurs only after the completion of steps 1 and 2.” Apple now moves for summary judgment of noninfringement, arguing that its devices do not completely form the alleged inner and outer codes before those codes are combined to generate the preamble sequence.

The preamble sequence is formed by multiplying the chips of the inner code by the chips of the outer code. Consider this highly simplified example with 4-chip codes:

Inner Code: 1, 1, -1, -1

Outer Code: 1, -1, 1, -1

Preamble Seq: 1, -1, -1, 1

Apple's devices generate the first chips of the inner and outer codes (1 and 1) and multiply them to get the first chip of the preamble sequence (also 1), before generating the second chips of the inner and outer codes (1 and -1), which are then combined to form the second chip of the preamble (-1). According to my claim construction, the '559 method requires generating the entire inner code (1, 1, -1, -1) and the entire outer code (1,-1,1,-1) before multiplying them together.

The preamble sequences actually used by Apple's devices involve many more chips. But it is clear they generate a single chip of the inner code and a single chip of the outer code, then combine the two chips to form a single chip of the preamble sequence, before repeating the process to generate the next chip of the preamble sequence, and the next, and so on. This is chip-by-chip formation of the preamble sequence. My May 20 ruling determined that the method of '559, the method Apple is alleged to infringe, forms the preamble sequence sequentially; it forms *all* the chips of the inner and outer codes before multiplying them to create the entire preamble sequence. This is an "all at once" rather than "one by one" method of creating the preamble sequence. Because the preamble sequence at issue is more than one chip long, the two methods of formation are different. So, given my interpretation of the order of steps 1, 2, and 3 in claim 5 of the '559 patent, Apple's devices cannot literally infringe claim 5 of '559.

Motorola concedes that it cannot establish literal infringement, but argues that it can establish infringement under the doctrine of equivalents by proving that chip-by-chip formation of the preamble code is equivalent to sequential formation. A device's method is equivalent to that claimed in a patent if it performs each function of the claim in the same way as claimed to achieve the same result as claimed, or, alternatively, if one skilled in the art would have considered any differences between the two "insubstantial." *Warner-Jenkinson Co. v. Hilton Davis Chemical Co.*, 520 U.S. 17, 39-40 (1997). Motorola argues that chip-by-chip formation is insubstantially different from forming the entire inner and outer codes before combining them.

Motorola requested that I decide whether claim 5 of the '559 patent described a method whereby the multiplication of the inner and outer codes could begin before the inner and outer codes were fully formed. In my May 20 ruling I determined that it did not describe such a method; claim 5 is limited to methods in which the inner and outer codes are fully formed before being multiplied together. Deeming the two methods equivalents would nullify the limitation inherent in my May 20 ruling. It would allow Motorola to establish infringement (via the doctrine of equivalents) as if I had adopted, rather than rejected, its argument about the order of claim 5's method steps.

The "specific exclusion principle" prevents "the doctrine of equivalents...[from being] employed in a way that wholly vitiates a claim limitation." *SciMed Life Systems, Inc. v. Advanced Cardiovascular Systems, Inc.*, 242 F.3d 1337, 1345–47 (2001); see also *Warner-Jenkinson Co. v. Hilton Davis Chemical Co.*, *supra*, 520 U.S. at 28–30. The principle bars Motorola from evading the limitation in my May 20 ruling—that the inner and outer codes must be formed prior to multiplying them together—by appealing to the doctrine of equivalents. The principle applies with as much force to limitations imposed through claims construction as to limitations that are clear on the face of the claim. *Athletic Alternatives, Inc. v. Prince Manufacturing, Inc.*, 73 F.3d 1573, 1582 (Fed. Cir. 1996).

Motorola is correct that the specific exclusion principle only applies when the doctrine of equivalents effectively eliminates a claim element (or, more accurately, limitation. *Cooper Cameron Corp. v. Kvaerner Oilfield Products, Inc.*, 291 F.3d 1317, 1320–21 (Fed. Cir. 2002); *Ethicon-Endo Surgery, Inc. v. U.S. Surgical Corp.*, 149 F.3d 1309, 1317 n.\* (Fed. Cir. 1998)). The requirement that formation of the inner and outer codes be completed before they are multiplied is such a limitation, and chip-by-chip generation violates that ordering requirement.

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**Motions in Limine**

Apple's motions in limine no. 17–21 [dkt. nos. 897, 887, 893, 888, 891, respectively] concern issues solely related to the validity and infringement of '559, and likewise several of Motorola's motions in limine [dkt. nos. 882, 884, 890]. All these motions are therefore dismissed as moot.

A handwritten signature in black ink, appearing to read "Richard A. Posner". The signature is fluid and cursive, with a prominent initial "R" and a long, sweeping underline.

United States Circuit Judge

June 5, 2012