



January 2000

Atmel Corporation v. Information Storage Devices, Inc.

Albert Smith

Jennifer Ishimoto

Follow this and additional works at: <http://digitalcommons.law.scu.edu/chtlj>



Recommended Citation

Albert Smith and Jennifer Ishimoto, *Atmel Corporation v. Information Storage Devices, Inc.*, 16 SANTA CLARA HIGH TECH. L.J. 473 (2000).

Available at: <http://digitalcommons.law.scu.edu/chtlj/vol16/iss2/16>

This Case Note is brought to you for free and open access by the Journals at Santa Clara Law Digital Commons. It has been accepted for inclusion in Santa Clara High Technology Law Journal by an authorized administrator of Santa Clara Law Digital Commons. For more information, please contact sculawlibrarian@gmail.com.

**ATMEL CORPORATION v. INFORMATION
STORAGE DEVICES, INC.**

Albert Smith[†] and Jennifer Ishimoto^{††}

I. BACKGROUND

In June 1995, Atmel Corporation (“Atmel”) sued Information Storage Devices, Inc. (“ISD”) for infringement of claim 1¹ of their U.S. Patent 4,511,811 (“‘811 patent”).² The ‘811 patent was for a “charge pump” circuit used to boost voltage during programming operations without excessive current leakage.

In November 1995, ISD moved for summary judgment asserting that claim 1, the sole claim of the ‘811 patent, was indefinite under § 112, ¶ 2. Specifically, ISD alleged that the specification failed to disclose any structure corresponding to the disputed high-voltage means limitation. The specification stated only that: “[T]he present invention may include high-voltage generator circuit 34. Known

¹ Partner, Chairman of the Patent Subgroup of the IP Section, Fenwick & West LLP.

^{††} B.S., Mechanical Engineering, University of California, Berkeley; Candidate for J.D., Santa Clara University School of Law, expected 2000.

1. This was the sole claim of the patent and read as follows:

1. An apparatus for selectively increasing the voltage on one or more of a plurality of conductive lines having inherent distributed capacitance disposed in a semiconductor circuit comprising:

means disposed on said semiconductor circuit for selecting one or more of said conductive lines; high voltage generating means disposed on said semiconductor circuit for generating high voltage from a lower voltage power supply connected to said semiconductor circuit;

voltage pulse generating means disposed on said semiconductor circuit for generating pulses;

means for capacitively coupling voltage pulses from said voltage pulse generating means to a voltage node in said semiconductor circuit;

transfer means responsive to said selecting means and connected to said voltage node for transferring increments of charge from said high voltage generating means to the inherent distributed capacitance in selected ones of said conductive lines in response to said voltage pulses;

said transfer means including switching means cooperating with said selecting means for blocking substantially all of the flow of current through and transfer of charge from said high voltage generating means to said conductive lines which are unselected.

2. *Atmel Corp. v. Information Storage Devices, Inc.*, 198 F.3d 1374 (Fed. Cir. 1999).

Circuit techniques are used to implement high-voltage circuit 34. See On-Chip High Voltage Generation in NMOS Integrated Circuits Using an Improved Voltage Multiplier Technique, IEEE Journal of Solid State Circuits, Vol[.] SC-11, No.3, June 1976 [the "Dickson article"]."³ The only other reference to the high-voltage generator circuit are two figures in the '811 patent that are shown as a "black box."⁴ No details as to the type of electrical components that make up the circuit are given. Thus, the district court found that because no other details or description were given about the high-generator circuit within the patent, the high voltage generating means could not go beyond those described in the Dickson article.⁵

The district court then looked into whether it was permissible to incorporate by reference material not in the specification. The district court adopted the rule in the Manual of Patent Examining Procedure (MPEP), section 608.01(p), which at the time of the '811 patent application prohibited material "necessary to . . . support the claims" from being incorporated by reference to a nonpatent publication.⁶ In making this ruling, the district court found that the '811 patent improperly incorporated by reference structure corresponding to the high-voltage means limitation to the Dickson article.⁷ Since the specification was absent any further description of the structure limitation, the patent was found invalid as indefinite under 35 U.S.C. § 112. Thus, the district court rejected Atmel's argument that the claim should be read using the standard of "one skilled in the art," finding that one could not evade the requirements under § 112, ¶ 6 just by stating that one skilled in the art would understand it. Since previous cases had found that failure to comply with § 112, ¶ 6, violates § 112, ¶ 2 as well, the district court found that the patent was invalid on both grounds. Thus, the lower court granted summary judgment for ISD.

II. HOLDING, RATIONALE AND DISCUSSION

Atmel appealed the decision of the district court. At the heart of the appeal were two issues: (1) whether the knowledge of one skilled in the art should be considered when determining if sufficient structure is disclosed in the specification to support a means-plus-

3. *Atmel*, 198 F.3d at 1377.

4. *Id.*

5. *See id.* at 1377-78.

6. *Atmel*, 198 F.3d at 1377.

7. *See id.* at 1377-78.

function claim; and (2) whether giving the name of an article was sufficient to describe a portion of the structure supporting the means-plus-function limitation.

A. "One Skilled in the Art" Standard

The Federal Circuit first addressed the question of what is the proper standard for determining whether the structure for a means-plus-function limitation has been adequately disclosed. Section 112, ¶ 2 states that: "The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention."⁸

On appeal, Atmel argued that the district court had erred in not considering the knowledge of one skilled in the art in determining whether the high-voltage means limitation was sufficiently definite under § 112, ¶ 2, given the description in the specification.⁹ ISD responded that the knowledge available to such a person cannot serve as a substitute for adequate disclosure of the structure in the specification.¹⁰ The Federal Circuit agreed with Atmel that the knowledge of one skilled in the art should be considered.¹¹ "For purposes of § 112, ¶ 2, it is the disclosure in the specification itself, not the technical form of the disclosure that counts."¹²

Furthermore, the court found that the "one skilled in the art" standard applies with equal force when considering whether a means-plus-function limitation is sufficiently definite under § 112, ¶ 2.¹³ To support this finding, the court cited *In re Dossel*,¹⁴ which also involved a means-plus-function limitation. In that case, the court found that even though the word "computer" was never used in the claims or the specification, one "in the medical imaging field" would find it "well within the realm of common experience that computers are used to generate images for display by mathematically processing digital input."¹⁵ Thus, like here, the court found that the means-plus-function limitation should not be invalid for indefiniteness.¹⁶ Moreover, the "one skilled in the art" standard is used for most other

8. 35 U.S.C. § 112, ¶ 2 (1994).

9. *Atmel*, 198 F.3d at 1378.

10. *Id.*

11. *Id.* at 1379.

12. *Id.* at 1378.

13. *Id.* at 1379.

14. *In re Dossel*, 115 F.3d 942 (Fed. Cir. 1997).

15. *Dossel*, 115 F.3d at 947.

16. *See Atmel*, 198 F.3d at 1379.

issues relating to patents, such as claim construction, enablement, best mode, and written description.¹⁷

Thus, the court found that for claims involving means-plus-function limitations, the specification must adequately disclose what is meant by the claim language.¹⁸ Failing to provide such adequate disclosure, the applicant would fail to meet the requirements of § 112, ¶ 2. However, the court found that interpreting what is disclosed must be done in light of the knowledge of one skilled in the art.¹⁹

B. Sufficiency of the Disclosure

The next question for the court was then whether there was sufficient disclosure of the means-plus-function limitation in the '811 patent. Atmel argued that district court erred by adopting MPEP section 608.01(p), which prohibited the incorporation of "essential material" by reference to nonpatent publications.²⁰ Accordingly, Atmel argued that the district court erred in holding that the structures described in the Dickson article could not be incorporated by reference into the '811 patent. Atmel contended that to find otherwise would "encourage patentees to include inordinate quantities of written material in the specification for fear of omitting 'essential material.'"²¹ Alternatively, Atmel argued that the '811 patent contained sufficient structural detail just by the mention of the Dickson article.²² Atmel relied on the testimony of an expert who stated that the mere mention of the title of the Dickson article in the specification was sufficient for one skilled in the art to envision the structure disclosed in that article.²³

ISD, however, argued that the district court correctly followed MPEP section 608.01(p) and excluded the structures described in the Dickson article.²⁴ ISD argued that allowing incorporation by reference would contravene the public notice function of patents, by making it nearly impossible for the competitors to determine if they were violating a patent without burdensome reference to extrinsic evidence.²⁵

17. *See id.* at 1379-80.

18. *See id.* at 1380.

19. *See id.*

20. *Id.*

21. *Id.*

22. *See Atmel*, 198 F.3d at 1380.

23. *See id.* at 1382.

24. *See id.* at 1381.

25. *Id.*

While the Federal Circuit agreed with ISD that the “means” (i.e. a structure) of a means-plus-function claim must appear in the specification, it disagreed that this determination turned on whether the patentee has “incorporated by reference” the material.²⁶ Instead, the court stated that the test was first whether the structure is described in the specification, and if so, whether one skilled in the art would identify the structure from that description.²⁷

The court focused on the language of § 112 in rejecting the argument that other sources could not be used to define language within the claims.²⁸ Specifically, the court cited paragraph 6, which refers to “structure . . . described in the specification and equivalents thereof.”²⁹ Furthermore, the court stated that “one skilled in the art,” would “know[] how to makes and use a bolt, a wheel, a gear, a transistor, or a known chemical starting material. The specification would be of enormous and unnecessary length if one had to literally reinvent and describe the wheel.”³⁰

The court agreed with ISD that here the Dickson article may not replace a structural description in the specification, however, it found the language of the specification to be sufficient.³¹ The court relied primarily on unrebutted expert testimony that the mere title of the article was “sufficient to indicate to one skilled in the art the precise structure of the means recited in the specification.”³² Thus, the court found that summary judgment finding the ‘811 patent invalid for indefiniteness was improper and remanded for further consideration.³³

III. CONCLUSION/EFFECT ON PATENT LAW

In essence, the Federal Circuit held (1) that the knowledge of one skilled in the art must be considered when determining if sufficient structure is disclosed in the specification to support a means-plus-

26. *Id.*

27. *Id.* at 1381.

28. *See Atmel*, 198 F.3d at 1381-82.

29. 35 U.S.C. § 112, ¶ 6 (1994) states:

“An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.”

30. *Atmel*, 198 F.3d at 1382.

31. *Id.*

32. *Id.*

33. *Id.*

function limitation; and (2) that material may be incorporated by reference from sources other than specified in the MPEP, if such material meets the standard of "one skilled in the art."