

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 24

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte PHILIP G. YASTROW

Appeal No. 95-4220
Application No. 08/176,297¹

ON BRIEF

Before HAIRSTON, KRASS, and FLEMING, Administrative Patent Judges.

KRASS, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from claims 5 through 7 and 12 through 25, all of the claims remaining in the application.

¹Application for patent filed January 3, 1994. According to appellant, this application is a continuation of Application 07/756,396 filed September 6, 1991, now abandoned.

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The invention pertains to a method and apparatus for estimating power in an integrated circuit.

Representative independent claim 5 is reproduced as follows:

5. A computer implemented method for estimating power dissipation characteristics of a circuit comprising a plurality of nodes, the method used in a circuit design process for designing an electronic circuit for operation at a certain clock rate and having a first number of nodes and a second number of gates, said method comprising the following steps:

(a) analyzing predefined artwork data associated with said circuit to determine data on the geometry of a first node;

(b) generating capacitance data for said first node on the basis of said geometry data;

(c) generating frequency data associated with said first node;

(d) determining voltage data associated with said first node;

(e) computing an estimate of power associated with said first node on the basis of at least said capacitance, frequency and voltage data;

(f) repeating the above steps for each remaining node;

(g) summing said estimates of power for each node to determine an estimate of total power dissipation for the circuit; and

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(h) generating output data indicative of said estimate of total power;

said output data being used in said circuit design process to determine whether at least one of (1) the number of gates of said circuit should be altered and (2) said clock frequency should be altered.

No references are relied on by the examiner.

Claims 5 through 7 and 12 through 25 stand rejected under 35 U.S.C. 101 as being directed to nonstatutory subject matter.

Reference is made to the brief and answer for the respective positions of appellant and the examiner.

OPINION

We reverse.

The examiner applies the Freeman-Walter-Abele test² in holding the claimed subject matter to be directed to nonstatutory subject matter. The most recent interpretation by the Court of Appeals for the Federal Circuit is that the

²In re Freeman, 573 F.2d 1237, 197 USPQ 464 (CCPA 1978); In re Walter, 618 F.2d 758, 205 USPQ 397 (CCPA 1980); In re Abele, 684 F.2d 902, 214 USPQ 682 (CCPA 1982).

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Freeman-Walter-Abele test has little, if any, applicability to determining the presence of statutory subject matter. State Street Bank & Trust Co., v. Signature Financial Group, Inc., 149 F.3d 1368, 47 USPQ2d 1596 (Fed. Cir. 1998).

The examiner's application of the Freeman-Walter-Abele test determined that the instant claims recite an algorithm. However, as noted by the court in State Street Bank, 149 F.3d 1368, 1373, 47 USPQ2d 1596,1602 (Fed. Cir. 1998).

the mere fact that a claimed invention involves inputting numbers, calculating numbers, outputting numbers, and storing numbers, in and of itself, would not render it nonstatutory subject matter, unless... its operation does not produce a "useful, concrete and tangible result."

The instant claimed invention clearly is directed to producing a useful, concrete and tangible result, that result being the generation of an output indicative of the estimate of total power dissipation characteristics of a circuit. That output, as recited in independent claims 5 and 12, is then further used to design circuits.

Since the instant claimed subject matter clearly has practical utility, a real world use that is more than a mere

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abstraction, we find no basis for a rejection of that claimed subject matter under 35 U.S.C. 101 as being directed to nonstatutory subject matter.

The examiner's decision is reversed.

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REVERSED

KENNETH W. HAIRSTON)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
ERROL A. KRASS)	APPEALS
Administrative Patent Judge)	AND
)	INTERFERENCES
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REVERSED

Prepared: October 22, 1998