

The opinion in support of the decision being entered today was *not* written for publication and is *not* binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte MANUEL S. CLEMENT, VIVEK TRIVEDI,
and SADIQ MOHIUDDIN

Appeal 2007-1250
Application 10/458,537
Technology Center 2800

Decided:

Before KENNETH W. HAIRSTON, ANITA PELLMAN GROSS, and
JEAN R. HOMERE, *Administrative Patent Judges*.

GROSS, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Clement, Trivedi, and Mohiuddin (Appellants) appeal under 35 U.S.C. § 134 from the Examiner's final rejection of claims 1 through 27, which are all of the claims pending in this application.

Appellants' invention relates to a method and system used to design and test circuitry, including timing analyses, such as static timing analysis techniques (Specification 1: 4-6). Claim 1 is illustrative of the claimed invention, and it reads as follows:

1. A method, comprising:

receiving initial static timing environment data associated with a circuit; and

generating a data file including a plurality of all possible sources of a generated clock included in the circuit.

The prior art reference of record relied upon by the Examiner in rejecting the appealed claims is:

Daga US 6,877,139 B2 Apr. 05, 2005

Claims 1 through 27 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Daga.

We refer to the Examiner's Answer (mailed August 28, 2006) and to Appellants' Brief (filed June 16, 2006) and Reply Brief (filed October 11, 2006) for the respective arguments.

SUMMARY OF DECISION

As a consequence of our review, we will reverse the anticipation rejection of claims 1 through 27.

OPINION

Appellants contend (Br. 10) that Daga discloses generating timing constraints, but fails to disclose the claimed data file including a plurality of

all possible sources of a generated clock included in the circuit. Appellants contend (Br. 10-11) that Daga's golden timing constraints include clocking definitions and exceptions, but not all possible sources of a generated clock, as timing constraints and sources of a generated clock are independent and different concepts.

The Examiner asserts (Answer 3 and 6) that Daga's generating golden timing constraints (104), which include clock definitions and exceptions, "anticipates a reasonably broad interpretation of 'generating a data file including all possible sources of a generated clock within a circuit.'" Thus, the issue is whether Daga's golden timing constraints include all possible sources of a generated clock included in the circuit.

Daga (col. 6, ll. 18-24) defines golden timing constraints as the user-provided clock definitions at the start of the design and the false and multi-cycle paths, or exceptions to single-cycle clocking. Appellants (Specification 3: 9-10) define the initial static timing environment data as including the design constraint file. Appellants (Specification 3: 4-7) further define the design constraint file as the clock constraints, the design rule constraints, and timing exceptions such as false and multi-cycle paths. Therefore, Daga's golden timing constraints correspond to Appellants' design constraint file, which is part of the *initial* conditions, and, thus, not to all possible sources of a *generated* clock. We find no suggestion in Daga that, and the Examiner has failed to present a convincing explanation as to why, the golden timing constraints provide not only the initial constraints, but also all possible sources of a generated clock within a circuit, as claimed. Accordingly, we cannot sustain the anticipation rejection of claims 1 through 27 over Daga.

With regard to the dissent, we point out that the section of the MPEP and the cases cited all involve devices wherein the issue was whether the descriptive material had a functional relationship with the substrate upon which it was placed. We agree that the structure of a data file does not change with the type of data placed therein. However, we are not convinced that the same analysis applies to method steps. Independent claim 1, for example, recites a step of generating a data file with particular data therein. The step of generating a data file with particular data is basically the step of generating the particular data, and we find that such a step could change depending on the type of data being generated. Accordingly, we disagree with the dissent that the type of data recited in the claims is merely non-functional descriptive material that cannot be given patentable weight.

ORDER

The decision of the Examiner rejecting claims 1 through 27 under 35 U.S.C. § 102(e) is reversed.

Appeal 2007-1250
Application 10/458,537

REVERSED

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Homere, *Administrative Patent Judge, dissenting.*

I write separately to voice my disagreement with the majority's holding that claims 1 through 24 are not anticipated by Daga. The majority finds that Daga's disclosure of the golden timing constraints teaches Appellants' generated data file, as recited in claim 1. The majority finds, however, that Daga's golden timing constraints do not include all possible sources of a generated clock within a circuit. Consequently, the majority decides to reverse the Examiner's anticipation rejection of the cited claims. From that decision, I respectfully dissent.

In my view, the minimum requirements of claim 1 are receiving data and generating a data file. The fact that the generated data file includes all possible sources of a generated clock included in the circuit carries no patentable weight. In other words, the informational content of the generated data file cannot be relied upon to patentably distinguish the claim over the prior art of record.¹ The mere arrangement of facts or data without any functional interrelationship is not a process, machine, manufacture or composition of matter.² Such arrangement of data is known as

¹ It is readily apparent to me that Appellants are attempting to patentably distinguish each claim on appeal on the basis of the nature of the generated data. Therefore, with respect to all pending claims in the present appeal, the issue should be whether these claims that differ from the prior art solely as to "non-functional descriptive material" are not anticipated by Daga under 35 U.S.C. § 102.

² It should be noted that the two disjointed steps recited in claim 1 perform no apparent function. There is no indication that the received data and the

nonfunctional descriptive material, as discussed in *Manual of Patent Examining Procedure* (MPEP) § 2106.01 (8th Ed., Rev. 5, Aug. 2006). The content of the nonfunctional descriptive material carries no weight in the analysis of patentability over the prior art. *Cf. In re Ngai*, 367 F.3d 1336, 1339, 70 USPQ2d 1862, 1864 (Fed. Cir. 2004) (“[w]here the printed matter is not functionally related to the substrate, the printed matter will not distinguish the invention from the prior art in terms of patentability,” (quoting *In re Gulack*, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983)); *In re Lowry*, 32 F.3d 1579, 1583, 32 USPQ2d 1031, 1034 (Fed. Cir. 1994) (“Lowry does not claim merely the information content of a memory. . . . [N]or does he seek to patent the content of information resident in a database.”)).

It is therefore my view that Daga’s disclosure of the golden timing constraints teaches the claimed data file, as recognized by both Appellants and the majority. It is further my view that the plurality of all possible sources of a generated clock included in the circuit is directed to the content of the generated data file. Therefore, it carries no patentable weight. That is, Daga’s teachings are sufficient to anticipate claim 1. Thus, I cannot agree with the majority’s reversal of the Examiner’s rejection. Accordingly, I would affirm Examiner’s prior art rejection of the claims as being anticipated by Daga.

generated data file were ever used to accomplish anything. Further, there is no indication as to how these two steps are related.