

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte CYNTHIA BERTINI and JOHN NGUYEN

Appeal 2007-3509
Application 10/065,801
Technology Center 2100

Decided: January 8, 2008

Before HOWARD B. BLANKENSHIP, JEAN R. HOMERE, and
STEPHEN C. SIU, *Administrative Patent Judges*.

SIU, *Administrative Patent Judge*.

DECISION ON APPEAL

I. STATEMENT OF THE CASE

Appellants appeal under 35 U.S.C. § 134(a) from the Examiner's Final Rejection of claims 1-24. We have jurisdiction under 35 U.S.C. § 6(b). We affirm.

A. INVENTION

The invention at issue relates to storing and managing schematics of a product (Spec. 1). In particular, one instance of a master file containing schematic information for a project is stored (*id. 6*). When the information is checked out by a user, it cannot be checked out by another user such that the data could be viewed by the other user, but not modified (*id.*).

B. ILLUSTRATIVE CLAIMS

Claim 1, which further illustrates the invention, follows.

1. A method for managing electrical schematic data comprising:
 - creating a logical schematic for a part;
 - creating a layout schematic for said part;
 - creating a physical schematic for said part;
 - associating said logical schematic, said layout schematic and said physical schematic together to form a part master file;
 - storing said part master file on a computer network;
 - providing access to said part master file to a plurality of user locations; and
 - controlling modification of said part master file, whereby said controlling comprises allowing only one of said plurality of user locations to modify said part master file at a time.

C. REJECTION

Claims 1, 3-6, 8-12, 14-19, and 21-24 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,298,319 (“Heile”). Claim

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7 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Heile and U.S. Patent No. 6,094,654 (“Van Huben”). Claims 2, 13, and 20 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Heile and J.T. Tou, et al., *Knowledge-Based Approach for the Verification of CAD Database Generated by an Automatic Schematic Capture System*, 24th ACM/IEEE Design Automation Conference, at 713-720 (1987) (“Tou”).

II. CLAIM GROUPING

“When multiple claims subject to the same ground of rejection are argued as a group by appellant, the Board may select a single claim from the group of claims that are argued together to decide the appeal with respect to the group of claims as to the ground of rejection on the basis of the selected claim alone. Notwithstanding any other provision of this paragraph, the failure of appellant to separately argue claims which appellant has grouped together shall constitute a waiver of any argument that the Board must consider the patentability of any grouped claim separately.” 37 C.F.R. § 41.37(c)(1)(vii) (2006).¹

Appellants argue claims 1, 3-6, 8-12, 14-19, and 21-24 as a first group (App. Br. 4-5), claim 7 as a second group, and claims 2, 13, and 20 as a third group (*Id.* 5-6). We select claim 1 as the sole claim on which to decide the

¹ We cite to the version of the Code of Federal Regulations in effect at the time of the Appeal Brief. The current version includes the same rules.

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appeal of the first group and claim 2 as the sole claim on which to decide the appeal of the third group.

III. CLAIMS 1, 3-6, 8-12, 14-19, and 21-24

As set forth above, we select claim 1 as the sole claim on which to decide the appeal of the first group. “Rather than reiterate the positions of parties *in toto*, we focus on the issue therebetween.” *Ex Parte Filatov*, No. 2006-1160, 2007 WL 1317144, at *2 (BPAI 2007).

Appellants argue that Heile fails to disclose “a layout schematic and a physical schematic as defined by the present claims.” (App. Br. 4). The Examiner finds that Heile discloses a layout schematic including “electrical components and their interconnections” (Ans. 13; Heile, Fig. 17) and a physical schematic including “the exact physical position of the components” (Ans. 13; Heile, col. 7, ll. 48-57 and Fig. 18).

According to the Specification, a layout schematic “is a schematic diagram that shows the electrical components used in the design and the connections between them . . . but does not describe the exact physical positioning of the components.” (Spec. 4). Heile discloses a schematic diagram that shows the electrical components in a design and the connections between them (Fig. 17). Therefore, we agree with the Examiner that Heile discloses a “layout schematic.”

Heile also discloses an “overall design” of a “complete electronic design for a given device” (col. 21, ll. 62-65, Fig. 18). According to the Specification, a physical schematic “fully describes the electrical

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components used and their connections, showing the exact physical positioning of the components.” (Spec. 4). Because Heile discloses a schematic including the “overall design” of a “complete electronic design for a given device,” we find that the “complete” design includes a diagram that “fully describes the electrical components and their connections” (i.e., a “physical schematic”). Therefore, we are unpersuaded by Appellants’ argument.

We also find that, regardless of its definition, a “logical schematic,” “layout schematic,” or “physical schematic” constitutes “non-functional descriptive material” and is not accorded patentable weight. *Functional* descriptive material consists of data structures or computer programs which impart functionality when employed as a computer component. *Non-functional* descriptive material refers to data content that does not exhibit a functional interrelationship with the substrate and does not affect the way the computing processes are performed. See MPEP 2106.01 (“‘Nonfunctional descriptive material’ includes but is not limited to music, literary works, and a compilation of mere arrangement of data.”).

When “non-functional descriptive material” is recorded or stored in a memory or other medium (i.e., substrate) it is treated as analogous to printed matter cases where what is printed on a substrate bears no functional relationship to the substrate and is given no patentable weight. *See In re Gulack*, 703 F.2d 1381, 1385 (Fed. Cir. 1983) (“Where 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.

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Although the printed matter must be considered, in that situation it may not be entitled to patentable weight.”). *See also Ex parte Curry*, 84 USPQ2d 1272 (BPAI 2005) (nonprecedential) (Federal Circuit Appeal No. 2006-1003; affirmed without written opinion Jun. 12, 2006). The Examiner need not give patentable weight to descriptive material absent a new and unobvious functional relationship between the descriptive material and the substrate. *See In re Lowry*, 32 F.3d 1579, 1582-83 (Fed. Cir. 1994); *In re Ngai*, 367 F.3d 1336, 1338 (Fed. Cir. 2004). *See also Ex parte Mathias*, 84 USPQ2d 1276 (BPAI 2005) (nonprecedential) (Federal Circuit Appeal No. 2006-1103; affirmed without written opinion Aug. 17, 2006).

We find that the logical schematic, layout schematic, and physical schematic constitute non-functional descriptive material. In other words, we find that the steps of creating each of the schematics, associating the schematics, storing, providing access, and controlling modification do not change their functions based upon the content of any of the schematics. Because neither the logical schematic, layout schematic, nor physical schematic bears functional relationship to the substrate (i.e., memory or storage), we accord these claim limitations no patentable weight as non-functional descriptive material.

Hence, claim 1 requires no more than creating first data, second data, and third data; associating each of the first, second, and third data; storing the associated first, second, and third data; providing access to the stored data; and controlling modification of the stored data. We find that Heile discloses associating data with each other and storing the data corresponding

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to a project such as “source files A, B, C, and D 110” (col. 10, ll. 49-50) as well as providing access to the data and controlling modification to the data as claimed by controlling “editing of files so that two engineers may not inadvertently edit the same global source file at the same time” (col. 3, ll. 19-21). We are therefore unconvinced by Appellants’ argument.

It follows that Appellants have failed to demonstrate that the Examiner erred in rejecting claim 1. Therefore, we affirm the rejection of claim 1 and of claims 3-6, 8-12, 14-19, and 21-24, which fall therewith.

IV. CLAIM 7

Appellants argue that “like the Heile reference, there is no teaching or suggestion in the Van Huben reference for associating the three types of schematics, logical, layout, and physical together in one file.” (App. Br. 5). As set forth above, we find that Heile discloses associating data in a file. Also as aforementioned, we find that the logical, layout, and physical schematics constitute non-functional descriptive material and are not accorded patentable weight.

It follows that Appellants have failed to demonstrate that the Examiner erred in rejecting claim 7. Therefore, we affirm the rejection of claim 7.

IV. CLAIMS 2, 13, and 20

As set forth above, we select claim 2 as the sole claim on which to decide the appeal of the third group. Appellants argue that “Tou et al. does

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not teach the creation of a part master file from a logical schematic, layout schematic and physical schematic.” (App. Br. 6). As set forth above, we find that Heile discloses this feature. Also as aforementioned, we find that the logical, layout, and physical schematics constitute non-functional descriptive material and are not accorded patentable weight.

It follows that Appellants have failed to demonstrate that the Examiner erred in rejecting claim 2. Therefore, we affirm the rejection of claim 2, and of claims 13 and 20, which fall therewith.

IV. ORDER

In summary, the rejection of claims 1, 3-6, 8-12, 14-19, and 21-24 under § 102(e) and of claims 2, 7, 13, and 20 under § 103(a) is affirmed.

No time for taking any action connected with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED

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