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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte SANG-HUN LEE

Appeal 2011-008900
Application 11/682,997
Technology Center 2600

Before JOSEPH L. DIXON, ST. JOHN COURTENAY III, and
CARLA M. KRIVAK, *Administrative Patent Judges*.

COURTENAY, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant appeals under 35 U.S.C. § 134(a) from a final rejection of claims 1-40. We have jurisdiction under 35 U.S.C. § 6(b).

We Affirm.

STATEMENT OF THE CASE

Appellant's claimed invention "relates to a hard disk drive (HDD) protection apparatus and method, and a device having the same, and more particularly, to an HDD protection apparatus and method to control an HDD protection procedure of the HDD in response to an alert signal, and a device having the same." (Spec. ¶ [0002]). Independent claim 1, reproduced below, is representative of the subject matter on appeal:

1. A hard disk drive protection apparatus, comprising:

a hard disk drive (HDD);

an alert generator;

a notice signal generation unit to generate a notice signal indicating a vibration alert or an audio alert that is to be generated by the alert generator; and

a controller to receive the notice signal and to control operations of the HDD and the alert generator based on the notice signal.
(disputed limitations emphasized).

REJECTION

The Examiner rejected claims 1-40 under 35 U.S.C. § 102(e) as being anticipated by Pasolini (U.S. Pat. 7,450,332 B2).

GROUPING OF CLAIMS

Based on Appellant's arguments, we decide the appeal of the anticipation rejection on the basis of representative claim 1. *See* 37 C.F.R. § 41.37(c)(1)(iv).

CONTENTIONS

Appellant contends, inter alia:

Pasolini merely describes detecting a free-fall using the acceleration sensor 20 and protecting the portable apparatus 10 based on the detection of the free-fall. (See Pasolini, col. 5, lines 40-65). That is, Pasolini merely describes that “the accelerometer 20 senses the movements of the electronic portable apparatus 10 and generates the corresponding acceleration signals A_x , A_y , and A_z .” (See Pasolini, col. 5, lines 40-43). Pasolini further describes that “the free-fall detection circuit 24 compares each one of the acceleration signals A_x , A_y , A_z with a preset acceleration threshold A_{th} ... and generates a free-fall detection signal F if certain conditions **are met** which are indicative of a free-fall event.” (See Pasolini, col. 5, lines 43-53, emphasis added). However, Pasolini cannot be construed as teaching or disclosing, among other things, Appellant’s “a notice signal generation unit to generate a notice signal indicating a vibration alert or an audio alert that is to be generated by the alert generator,” as ... recited in independent claim[] 1.

(App. Br. 6).

In the Reply Brief, Appellant similarly contends:

At best, Appellant submits that Pasolini describes a free-fall detection circuit 24 that “compares each one of the acceleration signals A_x , A_y , A_z ” received from the accelerometer 20 and generates a “free-fall detection signal F” to control a “turning-on of a warning light” or “emission of an alarm sound signal” upon “detection of the freefall,” not a “notice signal generation unit” to “generate” a “notice signal” to indicate a “vibration alert” or an “audio alert.”

(Reply Br. 5).

ISSUE

Under § 102, did the Examiner err in finding that Pasolini discloses a “notice signal generation unit *to generate* a notice signal indicating a vibration alert *or* an audio alert that is *to be generated* by the alert generator,” within the meaning of representative claim 1 (emphasis added)?

ANALYSIS

This appeal turns upon claim construction. Our reviewing court guides that “[i]n the patentability context, claims are to be given their broadest reasonable interpretations . . . limitations are not to be read into the claims from the specification.” *In re Van Geuns*, 988 F.2d 1181, 1184 (Fed. Cir. 1993) (citations omitted).

At the outset, we observe that the disputed limitation of “a notice signal generation unit *to generate* a notice signal indicating a vibration alert *or* an audio alert that is *to be generated* by the alert generator” is a statement of intended use. (Claim 1, emphasis added). “An[]intended use or purpose usually will not limit the scope of the claim because such statements usually do no more than define a context in which the invention operates.” *Boehringer Ingelheim Vetmedica, Inc. v. Schering-Plough Corp.*, 320 F.3d 1339, 1345 (Fed. Cir. 2003). Although “[s]uch statements often . . . appear in the claim’s preamble,” *In re Stencel*, 828 F.2d 751, 754 (Fed. Cir. 1987), a statement of intended use or purpose can appear elsewhere in a claim. *Id.* Because the notice signal and vibration alert or audio alert are not positively recited as *actually occurring*, these limitations are not accorded patentable weight.

We further observe that the hard disk drive, notice signal generation unit, and alert generator of claim 1 are not claimed in a particular *structural arrangement*, but instead appear to be coupled merely by signal flows that are recited as statements of intended use. Although features of an apparatus may be recited either structurally or functionally in the context of anticipation, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. *See In re Schreiber*, 128 F.3d 1473, 1477-78 (Fed. Cir. 1997).

Even assuming *arguendo* that the “to generate” and “to be generated” statements of intended use may be given patentable weight, we find the weight of the evidence supports the Examiner’s finding of anticipation:

Pasolini clearly teaches that the free-fall detection signal F is not only a signal notifying an occurrence of a free-fall based on sizes of the sensed disturbance signals, but also a signal could directly control emission of an alarm sound signal (see column 5 lines 44-50, column 10 lines 5-17; i.e., emission of an alarm sound signal indicating an audio alert). Since the limitations claimed by Appellant are that a notice signal generation unit to generate a notice signal indicating a vibration alert or an audio alert that is to be generated by the alert generator, and Pasolini fully discloses the or part limitations, i.e., or an audio alert generated by the alert generator (see column 5 lines 44-50, column 10 lines 5-17; i.e., emission of an alarm sound signal generated by free-fall detection device 16 satisfied the claimed limitations), therefore, Pasolini teaches the Appellant’s claimed limitations.

(Ans. 8).

As relied on by the Examiner (*Id.*), Pasolini discloses:

As will be described in greater detail hereinafter, the free-fall detection circuit 24 compares each one of the acceleration signals A_x , A_y , A_z with a preset acceleration threshold A_{th} , stored in the threshold register 22, and generates

a free-fall detection signal F, if certain conditions are met which are indicative of a free-fall event. The free-fall detection signal F is then sent to an output 26 of the free-fall detection device 16, to be sent in real time to the processor unit 18, as an interrupt signal for immediately activating appropriate actions for protecting the portable electronic apparatus 10. A typical action is to issue a command to the HDD device 11 through an industrial standard interface (such as ATA or SATA), for controlling a forced parking of the read/write head 13 in a safe position of the HDD device 11.

(col. 5, ll. 43-56).

As relied on by the Examiner (Ans. 8), Pasolini further discloses that the free-fall detection signal (i.e., notice signal) triggers an audible alarm (audio alert):

For example, the above signal could directly control a switch designed to disable a given function within the portable electronic apparatus, or else control turning-on of a warning light, *or emission of an alarm sound signal upon detection of the free-fall*. In general, shown in FIG. 10, the free-fall detection signal F could directly control an actuatable circuit 70 in the portable electronic apparatus 10, configured to activate appropriate protection actions for the portable electronic apparatus 10.

(col. 10, ll. 8-17).

Given this evidence, on this record, we are not persuaded of Examiner error. Accordingly, we sustain the Examiner's anticipation rejection of representative claim 1, and independent claims 14, 24, 28, 30, and 39 which recite the aforementioned disputed limitations in commensurate or similar form. The remaining dependent claims (not argued separately) fall with their associated independent claim. *See* 37 C.F.R. § 41.37(c)(1)(iv).

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DECISION

We affirm the Examiner's rejection under § 102 of claims 1-40.

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

ORDER

AFFIRMED

peb