UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte WILLIAM R. KISSEL

Appeal 2008-0537
Application 11/302,294
Technology Center 3600

Decided: March 21, 2008

Before MURRIEL E. CRAWFORD, HUBERT C. LORIN, and MICHAEL W. O'NEILL, *Administrative Patent Judges*.

O'NEILL, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Kissel (Appellant) seeks our review under 35 U.S.C. § 134 of the final rejection of claims 41, 43, 52, 53, 61, and 63-68. We have jurisdiction under 35 U.S.C. § 6(b) (2002).

SUMMARY OF DECISION

We REVERSE.[1]

THE INVENTION

The claimed invention is directed to a brake control system and method for actuating the brakes of a towed vehicle. (Specification ¶ 0002.)

Claims 41, 61, 67, and 68, reproduced below, are representative of the subject matter on appeal.

41. A method for controlling a brake mechanism of a towed vehicle towed by a towing vehicle, comprising the steps of:

measuring acceleration of one of the towed vehicle or the towing vehicle in first and second directions using a two-dimensional accelerometer device and establishing first and second acceleration values, the first and second directions being perpendicular, respectively; and,

controlling the brake mechanism of the towed vehicle as a function of the first and second acceleration values, wherein the step of controlling the brake mechanism includes the step of establishing a magnitude of a horizontal component of the acceleration of one of the towing vehicle or the towed vehicle as a function of the first and second acceleration values.

61. A system for controlling a brake mechanism of a towed vehicle towed by a towing vehicle, comprising:

an accelerometer device for measuring acceleration of one of the towed vehicle or the towing vehicle in a first direction and responsively establishing a first acceleration value and for measuring acceleration of the vehicle in a second direction and responsively establishing a second acceleration value, the first and second directions being perpendicular; and,

[1] Our decision will make reference to Appellants' Appeal Brief ("App. Br.," filed Jan. 22, 2007), Reply Brief ("Reply Br.," filed May 16, 2007), and the Examiner's Answer ("Answer," mailed Apr. 25, 2007).

a controller coupled to the accelerometer device for receiving the first and second acceleration values and for controlling the brake mechanism of the towed vehicle as a function of the first and second acceleration values and for establishing a magnitude of a horizontal component of the acceleration of one of the towing vehicle or the towed vehicle as a function of the first and second acceleration values.

67. A method for controlling a brake mechanism of a towed vehicle towed by a towing vehicle, comprising the steps of:

measuring acceleration of one of the towed vehicle or the towing vehicle in first and second directions using a two-dimensional accelerometer device and establishing first and second acceleration values, the first and second directions being perpendicular, respectively;

establishing a magnitude of a horizontal component of the acceleration of one of the towing vehicle or the towed vehicle as a function of the first and second acceleration values; and,

controlling the brake mechanism of the towed vehicle as a function of the horizontal component of the acceleration of one of the towing vehicle or the towed vehicle.

68. A system for controlling a brake mechanism of a towed vehicle towed by a towing vehicle, comprising:

an accelerometer device for measuring acceleration of one of the towed vehicle or the towing vehicle in a first direction and responsively establishing a first acceleration value and for measuring acceleration of the vehicle in a second direction and responsively establishing a second acceleration value, the first and second directions being perpendicular; and,

a controller coupled to the accelerometer device for receiving the first and second acceleration values and establishing a magnitude of a horizontal component of the acceleration of one of the towing vehicle or the towed vehicle as a function of the first and second acceleration values and for controlling the brake mechanism of the towed vehicle as a function of the horizontal component of the acceleration of one of the towing vehicle or the towed vehicle.

THE PRIOR ART

The Examiner relies upon the following as evidence of unpatentability:

Robinson	US 6,837,551 B2	Jan. 04, 2005

THE REJECTIONS

The following rejections are before us for review:

Claims 41, 43, 52, 53, 61, and 63-68 are rejected under 35 U.S.C. § 102(e) as being anticipated by Robinson.

THE ISSUE

The issue is whether the Appellant has shown that the Examiner erred in rejecting the claims as being anticipated by Robinson.[2] This issue turns on whether establishing a magnitude of a horizontal component of acceleration either the towing vehicle or the towed vehicle as a function of the first and second acceleration values reads on summing the acceleration in the x direction with the acceleration in the y direction to determine the total acceleration.

[2] Only those arguments actually made by Appellants have been considered in this decision. Arguments that Appellants could have made but chose not to make in the Briefs have not been considered and are deemed to be waived. *See* 37 C.F.R. § 41.37(c)(1)(vii) (2007).

FINDINGS OF FACT

We find that the following enumerated findings of fact are supported by at least a preponderance of the evidence. *Ethicon, Inc. v. Quigg*, 849 F.2d 1422, 1427 (Fed. Cir. 1988) (explaining the general evidentiary standard for proceedings before the Office).

Robinson discloses in an illustrative embodiment, a dual axis accelerometer is used. This accelerometer determines the force of braking, i.e., the acceleration, in two axes, e.g., x and y axes. The accelerometer sums the acceleration in the x direction with the acceleration in the y direction to determine the total acceleration. (Robinson, col. 10, ll. 24-29.)

PRINCIPLES OF LAW

It is well settled that in order for the examiner to establish a *prima facie* case of anticipation, each and every element of the claimed invention, arranged as required by the claim, must be found in a single prior art reference, either expressly or under the principles of inherency. *See generally*, *In re Schreiber*, 128 F.3d 1473, 1477 (Fed. Cir. 1997); *Diversitech Corp. v. Century Steps, Inc.*, 850 F.2d 675, 677-78 (Fed. Cir. 1988); *Lindemann Maschinenfabrik GMBH v. American Hoist and Derrick,* 730 F.2d 1452, 1458 (Fed. Cir. 1984).

When relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art. *See Ex parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Patent App. & Int. 1990).

ANALYSIS

In reaching our decision in this appeal, we have given careful consideration to the Appellant's Specification and claims, to the applied prior art reference, and to the respective positions articulated by the Appellant and the Examiner. Upon evaluation of all the evidence before us, it is our conclusion that the evidence adduced by the Examiner is not sufficient to establish a prima facie case of anticipation with respect to claims. Accordingly, we will not affirm the Examiner's decision to reject the claims under 35 U.S.C. § 102(e). Our reasoning for this determination follows.

We agree with the Examiner that the limitations of a two-dimensional accelerometer and an accelerometer device read on Robinson's disclosure of a dual axis accelerometer. However, we do not agree with the Examiner that the limitation of establishing a magnitude of a horizontal component of the acceleration of one of the towing vehicle or the towed vehicle as a function of established first and second acceleration values reads on Robinson's disclosure of summing the acceleration in the x direction with the acceleration in the y direction to determine the total acceleration. At most, with the evidence and analysis provided by the Examiner, the summation of the acceleration in the x direction with the acceleration in the y direction yields the resultant vector of acceleration.

The Examiner has not established that the resultant vector of acceleration is necessarily the established magnitude of a horizontal component of acceleration of either a towing vehicle or towed vehicle as

required when the Examiner states the combination of x and y axes acceleration is inherently the horizontal magnitude because it is in the x-y plane and that such would be recognized by one skilled in the art. (Answer 3.) If the Examiner is going to rely on theory of inherency in order to explain that this limitation reads on the disclosure of the reference cited, then Examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art, in this case Robinson.

The Appellant has pointed out that the limitation of establishing a magnitude of a horizontal component of acceleration of either the towing vehicle or towed vehicle is absent from Robinson. (App. Br. 18 and 21.) As such, without more evidence and explanation from the Examiner providing a basis in fact and/or technical reasoning to reasonably support the resultant acceleration vector inherently establishes a magnitude of a horizontal component of acceleration of either the towing vehicle or towed vehicle, we are constrained not to sustain the Examiner's rejection on appeal.

CONCLUSIONS OF LAW

We have concluded that the Appellant has shown that the Examiner erred in rejecting the claims as being anticipated by Robinson.

DECISION

The decision of the Examiner to reject the claims as being anticipated is reversed.

REVERSED

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