

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 19

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte JOHANNES SCHMITT
and MATTHAUS KOCH

Appeal No. 2002-1556
Application 09/409,583

ON BRIEF

Before STAAB, MCQUADE, and NASE, Administrative Patent Judges.
MCQUADE, Administrative Patent Judge.

DECISION ON APPEAL

Johannes Schmitt et al. appeal from the final rejection of claims 1 through 7, 9, 11 and 13 through 20. Claims 8, 10 and 12, the only other claims pending in the application, stand objected to as depending from rejected base claims.

THE INVENTION

The invention relates to "a device and method for preventing rollback of a vehicle on an incline" (specification, page 1). Representative claim 1 reads as follows:

1. A device for preventing a rollback of a vehicle on an incline, the vehicle including a brake system, at least one front wheel and at least one rear wheel, the brake system being

utilized for influencing a first braking pressure in a first wheel brake of the at least one rear wheel to distribute a braking action between the at least one front wheel and the at least one rear wheel, the braking action being distributed by actuating actuators assigned to the at least one rear wheel so that a differential is set between a second braking pressure in a second wheel brake of the at least one front wheel and the first braking pressure in the first wheel brake of the at least one rear wheel, the device comprising:

a first arrangement determining whether the vehicle is at a standstill due to the braking action in which the differential between the first braking pressure and the second braking pressure has been set; and

a second arrangement determining whether the vehicle is rolling back from the standstill, and increasing the first braking pressure in the first wheel brake of the at least one rear wheel to inhibit the rollback of the vehicle if the rollback is detected.

THE PRIOR ART

The reference relied on by the examiner to support the final rejection is:

Nell et al. (Nell)¹ 196 11 360 Sep. 25, 1997
German Patent Document

THE REJECTIONS

Claims 1 through 5, 7 and 17 through 20 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Nell.

¹ The record contains a copy of U.S. Patent No. 5,984,429 to Nell et al., an English language equivalent of the applied reference. Appended hereto is an English language translation of the reference prepared on behalf of the USPTO. As the appellants and examiner have relied to this point on the U.S. patent for their understanding of the reference, we shall do the same for purposes of this decision.

Appeal No. 2002-1556
Application 09/409,583

Claims 6, 9, 11 and 13 through 16 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Nell.

Attention is directed to the appellants' main and reply briefs (Paper Nos. 15 and 17) and to the examiner's final rejection and answer (Paper Nos. 10 and 16) for the respective positions of the appellants and the examiner regarding the merits of these rejections.

DISCUSSION

I. Grouping of claims

As a result of the appellants' statement that "all of the finally-rejected claims are being treated as a single group" (reply brief, page 2) and the focus of the arguments advanced in the briefs solely on independent claims 1 and 18, dependent claims 2 through 7, 9, 11 and 13 through 17 shall stand or fall with parent claim 1 and dependent claims 19 and 20 shall stand or fall with parent claim 18.

II. The merits

Nell discloses a road vehicle brake system which functions, when the driver depresses a brake pedal, to perform targeted braking with moderate vehicle deceleration or full braking with maximum vehicle deceleration (see column 4, lines 28 through 40). The brake system also allows the driver, after the vehicle is

Appeal No. 2002-1556
Application 09/409,583

stopped in traffic, to trigger an automatic stationary braking mode which prevents the vehicle from rolling, even if the brake pedal is released, until the driver terminates the mode. Nell teaches with respect to this automatic stationary braking mode that "[i]n practice, a brake pressure . . . of about 40 bar is sufficient in all conceivable situations. If the vehicle nevertheless starts to roll, an additional supply can be provided, i.e. the brake pressure increased again" (column 10, lines 19 through 23), and that

[a]n advantageous type of brake-pressure control is also within the scope of the present invention by coupling the maximum pressure by driving the brake booster 14 only into the wheel brakes 9, 11 of the driven rear wheels of the vehicle and by subjecting only the front-wheel brakes 7, 8 of the vehicle to a pressure reduced relative to this maximum achievable brake pressure by shutting off their inlet valves 24 or to no pressure at all [column 10, lines 49 through 55; see also column 14, lines 31 through 34].

Anticipation is established only when a single prior art reference discloses, expressly or under principles of inherency, each and every element of a claimed invention. RCA Corp. v. Applied Digital Data Sys., Inc., 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir. 1984). It is not necessary that the reference teach what the subject application teaches, but only that the claim read on something disclosed in the reference, i.e., that all of the limitations in the claim be found in or

fully met by the reference. Kalman v. Kimberly Clark Corp., 713 F.2d 760, 772, 218 USPQ 781, 789 (Fed. Cir. 1983), cert. denied, 465 U.S. 1026 (1984).

As framed by the appellants (see pages 5 through 8 in the main brief and pages 2 through 7 in the reply brief), the dispositive issue with respect to the anticipation rejection of independent claims 1 and 18 is whether Nell meets the limitations in claim 1, and the corresponding limitations in method claim 18, relating to the differential braking action. The appellants contend that

the claimed invention . . . provides for remedying a potential problem which may result from an EBD braking action,^[2] i.e., the problem of roll-back which may be experienced by a vehicle with a heavy rear load after

² The appellants' specification gives the following definition of EBD (electronic braking force distribution) braking:

EBD braking is defined as follows: a differential is set between the braking pressure on the front wheels and the rear wheels and thus the braking action is distributed at least by actuating actuators assigned to the rear wheels of the vehicle. This distribution of the braking pressure and thus of the braking action ensures that the rear axle is not locked before the front axle. In EBD distribution the braking action is "locked" in the rear wheels by appropriately activating the actuators assigned to the rear wheels, i.e., the pressure remains unchanged during EBD braking and cannot be increased by the driver. On the other hand, the braking pressure of the front wheels can be increased by the driver at any time [pages 4 and 5].

achieving standstill on an incline by means of an EBD braking action. Because of the EBD braking action, the brake pressure at the rear wheels cannot be increased further during a roll-back, and the driver is helpless in the face of vehicle roll-back. This problem is addressed by the present invention, as recited [in] claims 1 and 18, by a first arrangement that determines whether the vehicle is at a **standstill due to the EBD braking action** in which the differential between the first braking pressure and the second braking pressure has been set, and a second arrangement determining whether the vehicle is rolling back from the standstill, and increasing the first braking pressure in the first wheel brake of the at least one rear wheel to inhibit the roll-back of the vehicle if the roll-back is detected. In other words, the EBD braking is deactivated in case of a roll-back occurring **after a detected standstill which is due to the EBD braking action**.

Applicants respectfully submit that since the Nell et al. reference clearly fails to teach an EBD braking action, it is impossible for the Nell et al. reference to teach the claimed limitations of claims 1 and 18 [main brief, page 7].

The appellants further explain their position with the following arguments:

in the system described in the Nell et al. reference, the pressure differential is achieved in the stationary braking operation **automatically and independently of the driver**, as a function of the detected standstill, **after the standstill has been detected**.

In contrast to the explicit teachings of the Nell et al. reference, the claimed pressure differential between "the first braking pressure and the second braking pressure" in claims 1 and 18 is intrinsically achieved by the driver's braking **by the time the standstill condition is achieved**, i.e., prior to the detection of the standstill condition [main brief, page 6];

and

[i]n order for a standstill condition to be "due to the braking action in which the differential between the first braking pressure and the second braking pressure has been set," it is only logical that differential braking must be initiated **before** a standstill condition arises. However, this simply is not the case in *Nell et al.*: *Nell et al.* controls the brakes only **after** a standstill condition arises, and as such, cannot possibly disclose an arrangement that detects a standstill condition that is "due to the braking action in which the differential between the first braking pressure and the second braking pressure has been set," as recited in claim 1 [reply brief, page 4].

Although the appellants' characterization of the *Nell* disclosure ostensibly is accurate, the differential braking action limitations at issue in claims 1 and 18 are broad enough to read thereon notwithstanding the appellants' arguments to the contrary. In essence, these arguments fail at the outset because they are not based on limitations appearing in the claims (see *In re Self*, 671 F.2d 1344, 213 USPQ 1 (CCPA 1982)). More particularly, claims 1 and 18 do not require any sort of EBD braking action, let alone the detection of a standstill condition due to EBD braking action. Similarly, these claims do not require the differential between the first and second braking pressures to be achieved or initiated prior to or before standstill. As pointed out by the appellants, the *Nell* brake system sets a differential between first and second braking

Appeal No. 2002-1556
Application 09/409,583

pressures at the front and rear wheels, respectively, after standstill is attained and sensed. Once this pressure differential is set, however, the standstill condition becomes "due to" the differential braking action to the extent broadly recited in claims 1 and 18. Thus, the appellants' position that the subject matter recited in claims 1 and 18 distinguishes over Nell is not persuasive.

Accordingly, we sustain the standing 35 U.S.C. § 102(b) rejection of independent claims 1 and 18 as being anticipated by Nell.

As dependent claims 2 through 7, 9, 11, 13 through 17, 19 and 20 stand or fall with claims 1 and 18, we also sustain the standing 35 U.S.C. § 102(b) rejection of claims 2 through 5, 7, 17, 19 and 20 as being anticipated by Nell, and the standing 35 U.S.C. § 103(a) rejection of claims 6, 9, 11 and 13 through 16 as being unpatentable over Nell.

SUMMARY

The decision of the examiner to reject claims 1 through 7, 9, 11 and 13 through 20 is affirmed.

Appeal No. 2002-1556
Application 09/409,583

JPM/kis
KENYON & KENYON
ONE BROADWAY
NEW YORK, NY 10004