

The opinion in support of the decision entered today was not written for publication and is not binding precedent of the Board.

Paper No. 18

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte WAJIH KANJO and SCOTT NATSCHKE

Appeal No. 2003-0087
Application No. 09/512,164

ON BRIEF

Before FRANKFORT, STAAB, and NASE, Administrative Patent Judges.

STAAB, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on an appeal from the examiner's final rejection of claims 1-10 and 12-18, all the claims currently pending in the application. An amendment filed subsequent to the final rejection has been entered.

Appellants' invention pertains to "a spring applied parking brake assembly for use in a railway vehicle braking system which is activated by the absence of air in the railway vehicle braking system" (specification, page 1). A copy of the appealed claims can be found in the appendix to appellants' main brief.

The references applied in the final rejection are:

Ryburn et al. (Ryburn)	3,799,297	Mar. 26, 1974
Fontaine	3,842,950	Oct. 22, 1974
Graham	5,154,491	Oct. 13, 1992
Pierce et al. (Pierce)	5,353,688	Oct. 11, 1994

The following rejections under 35 U.S.C. § 103(a) are before us for review:¹

(1) Claims 1-5, 8 and 12-17, rejected as being unpatentable over Fontaine in view of Pierce.²

(2) Claims 6 and 7, rejected as being unpatentable over Fontaine in view of Pierce, and further in view of Ryburn.

¹In the final rejection, claims 1-8 and 12-18 were also rejected under 35 U.S.C. § 112, second paragraph. Since these claims have been amended subsequent to final rejection in such a manner so as to apparently overcome the examiner's criticism thereof, and since no mention of this rejection has been made by the examiner in the answer, we presume that the examiner has withdrawn the final rejection of claims 1-8 and 12-18 on this ground. *Ex parte Emm*, 118 USPQ 180, 181 (Bd. App. 1957).

²On page 7 of the answer, the examiner also referred to US Patents 3,983,966 and 3,955,370 in the explanation of this rejection, but these patents have been given no consideration since they were not positively included in the statement of the rejection. *Ex parte Raske*, 28 USPQ2d 1304, 1305 (Bd. Pat. App. & Int. 1993).

(3) Claims 9, 10 and 18, rejected as being unpatentable over Fontaine in view of Pierce, and further in view of Graham.

Reference is made to appellants' main and reply briefs (Paper Nos. 10½ and 13) and to the examiner's final rejection and answer (Paper Nos. 5 and 12) for the respective positions of appellants and the examiner regarding the merits of these rejections.

In the main brief (page 5), appellants have chosen to have the claims on appeal considered in the following groups: Group I (claims 1, 5, 8, 12 and 15-17)³; Group II (claims 2 and 13); Group III (claims 3 and 14); Group IV (claim 4); Group V (claims 6 and 7⁴); and Group VI (claims 9, 10 and 18). In accordance with 37 CFR § 1.192(c)(7), we select claims 1, 2, 3, 4, 6 and 9 for review, *infra*, and will decide the appeal as to each of the respective specified groupings on the basis thereof.

Discussion

Claim 1

At the outset, we observe that in proceeding before it, the PTO applies to the verbiage of claims the broadest reasonable meaning of the words in their ordinary usage as they would be understood by one of ordinary skill in the art, taking into account

³Appellants' claim grouping on page 5 of the main brief does not include claim 5 in any of the listed groups. We have included claim 5 in Group I since it depends from base claim 1 and has not been separately argued in either appellants' main brief or reply brief.

⁴It appears that claim 7 should depend from claim 6 rather than claim 5 in order to provide a proper antecedent for the "sealing means" of claim 7.

whatever enlightenment by way of definitions or otherwise that may be afforded by the written description contained in the applicant's specification. *In re Morris*, 127 F.3d 1048, 1054, 44 USPQ2d 1023, 1027 (Fed. Cir. 1997). In the present case, it is important to determine the meaning of the terminology "spring applied brake assembly" appearing in the preamble of each of the appealed claims. Consistent with appellants' specification, and in particular the paragraph bridging pages 10 and 11 thereof, we consider the terminology "spring applied brake assembly" as used by appellants in the appealed claims to refer to an actuator *per se* (as shown, for example, in appellants' Figure 4) as opposed to an actuator in combination with such additional structure as may be necessary to bring about the braking of a vehicle. With this in mind, we turn to claim 1.

Claim 1 is directed to "[a] spring applied brake assembly" (i.e., an actuator) "for a railway vehicle braking system" The spring applied brake assembly is said to comprise (a) a casing "engagable with" the railway vehicle braking system, (b) a piston assembly positioned within the casing, (c) a piston rod secured to the piston assembly, (d) a spring member disposed in the casing, and (e) an attachment means "for associating" said piston with a force transfer lever of the railway vehicle braking system. Our analysis of claim 1 leads us to conclude that it is directed to an actuator *per se*.

Fontaine, the examiner's primary reference in each of the rejections, is directed to an automatic parking or emergency brake system for motor vehicles. Fontaine's specification (col. 1, lines 48-57) states that an objective of the invention is to provide a

brake that provides desired brake pressure “to bring any vehicle so equipped to a gradual controlled stop, taking into account the great variation in weight between small motor cars and large school buses and trucks. . . .” Figures 4 and 5 show details of the brake actuator and Figures 6 and 7 shown the actuator incorporated into vehicle braking systems. There appears to be no dispute that Fontaine’s actuator comprises a casing 28, a piston assembly 29 positioned within the casing, a piston rod 31 secured to the piston assembly, a spring member 30 disposed in the casing, and an attachment means (elements 32 and/or 34) for associating the piston with a force transfer member of a braking system. Appellants contend, among other things, that Fontaine is not a spring applied brake assembly for a railway vehicle braking system, and that Fontaine does not disclose a brake actuator wherein the piston rod is extended, as opposed to being retracted, to initiate a brake application.

In rejecting claim 1, the examiner has taken the position that the actuator of Fontaine “[is] capable of use in a railroad vehicle brake system” (final rejection, page 3: answer, page 3). While we appreciate appellants’ argument that the actuator of Fontaine is not disclosed as being used in the manner set forth in appellants’ claim 1, we nonetheless share the examiner’s view regarding the capability of the Fontaine actuator. Support for the examiner’s position is found in the circumstance that railroad vehicles come in a variety of sizes and weights, including relatively small gage railroad vehicles, and in Fontaine’s disclosure at col. 1, lines 48-57, that the brake system thereof may provide a

braking force sufficient to stop vehicles of considerable weight such as large school buses and trucks. Based on the breadth of the claim and the above noted disclosure of Fontaine regarding the ability of the actuator to generate brake pressures sufficient to stop vehicles of relatively large weight, we consider the examiner's position regarding the capability of Fontaine's actuator to be well founded, notwithstanding that Fontaine does not expressly state that it is for use with a railway vehicle braking system.

As to appellants' argument that Fontaine does not disclose an actuator having a piston rod that extends outwardly to apply the brakes as required by claim 1, the examiner considers that it would have been obvious to provide this type of operation in Fontaine in view of the teachings of Pierce. For the reasons that follow, we consider that it is unnecessary to consider the teachings of Pierce in evaluating the standing rejection of claim 1.

It is a well settled principle of patent law that in considering the disclosure of a reference, it is proper to take into account not only the specific teachings of each reference, but also the inferences which one skilled in the art would reasonably have been expected to draw from the disclosure. *See In re Preda*, 401 F.2d 825, 826, 159 USPQ 342, 344 (CCPA 1968). In applying that principle to Fontaine, we observe that Fontaine describes Figure 6 as "a plan view showing how the brakes may be coupled to the applying mechanism" (col, 2, lines 57-58). In what appears to be a further reference to Figure 6, Fontaine states that "[s]haft 31 is connected through clevis 32 to the brake

mechanism, and will be operative to maintain a release of the brakes as long as sufficient fluid pressure is maintained in the cylinder 28 to overcome the pressure of the spring 30” (col. 4, lines 5-9). Fontaine describes Figure 7 as “a similar view showing the coupling to the hand-operated emergency or parking brake lever” (col. 2, lines 57-60). Admittedly, the specification of Fontaine makes no further direct reference to Figure 7. Fontaine does, however, state that it is an aim of the invention to provide an automatic parking or emergency brake that “can be reversed to *pull or push* on the brakes just as effectively” (col. 1, 51-53; emphasis added). This disclosure, coupled with the description of Figure 7 at col. 2, lines 59-60, leads us to conclude that one skilled in the art would reasonably infer from Fontaine’s disclosure as a whole that Figures 6 and 7 represent alternate arrangements for incorporating the actuator of Figures 4 and 5 into a braking system, with Figure 6 illustrating an arrangement wherein the clevis 32 at the left end of the piston rod 31 is utilized to provide a spring applied force to the brakes by *pulling* the force transmitting member 56, and with Figure 7 illustrating an arrangement wherein the clevis 34 at the right end of the piston rod 31 is utilized to provide a spring applied force to the brakes by *pushing* the force transmitting member 52⁵. Accordingly, we find that Figure 7 discloses an actuator having a piston rod that extends out of an actuator casing to actuate

⁵From Figure 7, it is also apparent that member 52 may be pivoted by a hand operated lever (i.e., lever 58) to set the brakes.

a brake, and that there would be recognition of this fact from a consideration of Fontaine by one skilled in the art.

As to the “attachment means” limitation of paragraph (e) of claim 1, clevis 34 of the right end of Fontaine’s piston rod includes an elongated slot and is shown in Figure 7 as being coupled to lever 52 by a pin (not numbered). We consider this slot and pin arrangement as corresponding to the slot and pin connection disclosed by appellants⁶ for accomplishing the function set forth in paragraph (e) for the attachment mean, such that Fontaine’s slot and pin arrangement fully responds to the “attachment means” limitation of paragraph (e) of claim 1.

Viewed in this light, Fontaine provides response for all limitations of claim 1, making the teachings of Pierce mere surplusage in this rejection. While a rejection over a single reference such as Fontaine would ordinarily be based on 35 U.S.C. § 102 rather than 35 U.S.C. § 103, the practice of nominally basing rejections on § 103 when, in fact, the actual ground of rejection is that the claim is anticipated by the prior art has been sanctioned by a predecessor of our present review court in *In re Fracalossi*, 681 F.2d 792, 794, 215 USPQ 569, 571 (CCPA 1982) and *In re Pearson*, 494 F.2d 1399, 1402, 181 USPQ 641, 644 (CCPA 1974). For these reasons, appellants’ argument (main brief, page 10 ½)

⁶See page 10, lines 13-20 of appellants’ specification, as well as the showing in appellants’ Figure 1 of a slot and pin connection between the piston rod and extension lever 64 for moving the lever.

regarding the failure of Pierce to overcome the deficiencies of Fontaine to render the subject matter of claim 1 obvious is simply not germane to the novelty issue discussed above.

Appellants' recurring argument in the main and reply briefs concerning the statements of use and/or function in the claims and the need to consider such language in applying the prior art is noted. Our courts of review have repeatedly indicated that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the structural limitations of that claimed. *See, for example, In re Yanush*, 477 F.2d 958, 959, 177 USPQ 705, 706 (CCPA 1973); *In re Finsterwalder*, 436 F.2d 1028, 1032, 168 USPQ 530, 534 (CCPA 1971); *In re Casey*, 370 F.2d 576, 580, 152 USPQ 235, 238 (CCPA 1967); and *In re Otto*, 312 F.2d 937, 939, 136 USPQ 458, 459 (CCPA 1963). Accord for this proposition is found in *In re Schreiber*, 128 F.3d 1473, 1477, 44 USPQ2d 1429, 1431 (Fed. Cir. 1997), wherein the Court noted that "[i]t is well settled that the recitation of an new intended use for an old product does not make a claim to that old product patentable." In the present case, we have considered the functional limitations appearing in the preamble and in paragraph (e) of claim 1 and agree with the examiner's position to the effect that they relate to intended use of the claimed device, that they do not lend patentable weight to the presently claimed subject matter, and that the actuator of

Fontaine reasonably appears to be capable of being used in the manner set forth in the claim.

In light of the foregoing, we will sustain the standing rejection of claim 1 under 35 U.S.C. § 103(a). We will also sustain the standing rejection of claims 5, 8, 12 and 15-17, since claims 1, 5, 8, 12 and 15-17 stand or fall together.

Claim 2

Claim 2 depends from claim 1 and adds that the casing includes an air inlet for allowing air to be applied within the casing to move the piston assembly and compress the spring.

Like appellants, we understand Fontaine as disclosing an actuator having an inlet (not numbered) connected to a hydraulic line 27 for allowing hydraulic fluid to be applied within the casing to move the piston and compress the spring 30. Bearing in mind that we have interpreted claim 1 as being directed to an actuator *per se*, we do not consider the term “air inlet” and the statement of function associated therewith (“for allowing air to be applied . . .”) of claim 2 as defining any structure that distinguishes the claimed subject matter over the actuator of Fontaine. Thus, claim 2 “reads on” the actuator of Fontaine such that the reference once again provides response for all claim limitations and anticipates the claim.⁷

⁷The law of anticipation does not require that the reference teach specifically what an appellant has disclosed and is claiming but only that the claims on appeal
(continued...)

On this basis, we will sustain the standing rejection of claim 2 under 35 U.S.C. § 103(a). *In re Fracalossi*, 681 F.2d at 794, 215 USPQ at 571; *In re Pearson*, 494 F.2d at 1402, 181 USPQ at 644. We will also sustain the standing rejection of claim 13 under 35 U.S.C. § 103(a) since appellants state that claims 2 and 13 stand or fall together.

Claim 3

Claim 3 depends from claim 1 and adds that the attachment means set forth in paragraph (e) of claim 1 “is associated with” an extension piece attached to the force transfer lever of the railway vehicle braking system. The requirement that the attachment means “*is associated with*” (emphasis added) the extension piece of the force transfer lever of the railway vehicle braking system positively relates the actuator to the railway vehicle braking system. Thus, in contrast to claim 1, claim 3 positively sets forth a relationship between a spring applied actuator and a component of a railway vehicle braking system whereby the actuator may operate the railway vehicle braking system. Notwithstanding the examiner’s view to the contrary (see pages 6-8 of the answer), the combined teachings of Fontaine and Pierce do not disclose or suggest that the actuator of Fontaine may be used to operate a railway vehicle braking system, much less that the actuator of Fontaine may be associated with an extension piece of a lever to operate a

⁷(...continued)
“read on” something disclosed in the reference, i.e., all limitations of the claim are found in the reference. See *Kalman v. Kimberly-Clark Corp.*, 713 F.2d 760, 772, 218 USPQ 781, 789 (Fed. Cir. 1983), *cert. denied*, 465 U.S. 1026 (1984).

railway vehicle braking system, as called for in claim 3. In this regard, the mere fact that the prior art structure *could* be modified in the manner proposed by the examiner does not make such a modification obvious unless the prior art suggests the desirability of doing so. See *In re Gordon*, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984).

For this reason, we will not sustain the standing rejection of claim 3. In that claim 14 positively recites that the piston rod “is joined with” an extension of the force transfer lever of the railway vehicle braking system, our reasons for not sustaining the examiner’s rejection of claim 3 apply to claim 14 as well. Hence, we also will not sustain the standing rejection of claim 14.

Claim 4

Claim 4 depends from claim 1 and adds that the casing “includes an attachment means^[8] for mounting said braking assembly to said at least one of a brake beam and a compression member.”

In accordance with *In re Donaldson Company*, 16 F.3d 1189, 1193, 29 USPQ2d 1845, 1849 (Fed. Cir. 1994), the “attachment means” limitation of claim 4 must be interpreted in accordance with the sixth paragraph of 35 U.S.C. § 112, i.e., “construed to cover the corresponding structure . . . described in the specification and equivalents thereof.” The means for mounting the casing to the brake beam or compression member

⁸The “attachment means” of claim 4 is not the same attachment means as the one set forth in paragraph (e) of claim 1.

described by appellants is the bolt/nut arrangement 66 shown in Figure 4 (specification, page 10, lines 3-13). The examiner has not explained, and it is not apparent to us, where in the combined teachings of Fontaine and Pierce any such bolt/nut arrangement or equivalent thereof is disclosed or suggested. We therefore conclude that a *prima facie* case of obviousness has not been made out as to claim 4. It follows that we cannot sustain the examiner's rejection of claim 4.

Claim 6

Claim 6 depends from claim 2 and recites, among other things, a sealing means positioned between the casing and the piston arrangement for preventing leakage of air. In rejecting this claim, the examiner further relies on Ryburn for a teaching of a seal 285 between a casing and a piston arrangement for preventing leakage of air.

Appellants' sole argument against the examiner's rejection of claim 6 is found on page 11 of the main brief and reads as follows:

Ryburn et al is cited as providing a seal between the casing and piston arrangement. However, the combination of Fontaine with Pierce et al fail[s] to meet the limitations of claim 1. It is Applicant's position that the addition of Ryburn et al to the rejection does not overcome the deficiencies of the original combination of Fontaine with Pierce et al.

From the above it is clear that appellants have not made a separate argument for patentability specifically directed to claim 6. Instead, appellants are content with asserting that claim 6 is patentable because it includes the limitations of base claim 1. In short,

appellants have failed to separately argue the patentability of claim 6 with any reasonable specificity. It therefore falls with claim 1. See *In re Nielson*, 816 F.2d 1567, 1572, 2 USPQ2d 1525, 1528 (Fed. Cir. 1987) and *In re Burckel*, 592 F.2d 1175, 1178-79, 201 USPQ 67, 70 (CCPA 1979). The standing rejection of claim 7 will also be sustained since appellants state that claims 6 and 7 stand or fall together.

Claim 9

With reference to appellants' Figures 4 and 5, independent claim 9 sets forth, among other things, a cylindrical member 82 mounted for longitudinal movement with the casing 67, a holding means 92 disposed on or attachable with the cylindrical member for preventing movement of the cylindrical member greater than a predetermined distance through an opening in the casing, and stop means 94 mounted on sidewalls of the cylindrical member for preventing movement of the cylindrical member greater than a predetermined distance through the opening in the casing.

The examiner concedes that the actuators of Fontaine and Pierce do not include a stop means as called for in claim 9. The examiner takes the position, however, that Graham "provides a stop means on the end of the spring member (90) for preventing the movement of the cylindrical member (146) greater than a predetermined distance through the opening in the casing" (answer, page 6), and that it would have been obvious in view of this teaching to provide Fontaine's actuator with a stop means as claimed.

The examiner's position is not well taken. First, the examiner has not specifically identified, and it is not apparent to us, precisely what element or elements of Graham the examiner regards as corresponding to the claimed "stop means." In this regard, element 146 in Figures 3A and 5-7 of Graham (the examiner's "cylindrical member") is a threaded shaft having a hand wheel 142 at one end and a release plate 144 at the other end, and its relevance to the actuator of Fontaine is not understood. Second, it is not clear, based on the teachings of the applied references, why one of ordinary skill in the art would consider it desirable, and thus obvious, to provide a stop means of the type called for in claim 9 in the actuator of Fontaine. In this regard, the motivation for the proposed modification must come from the teachings of the prior art and not appellants' own disclosure.

For the foregoing reasons, we conclude that a *prima facie* case of obviousness has not been made out as to claim 9, or claim 10 that depends therefrom. In that independent claim 18 contains limitations similar to those of claim 9 with respect to the stop means, we conclude that a *prima facie* case of obviousness also has not been made out as to claim 18. It follows that we cannot sustain the examiner's rejection of claims 9, 10 and 18.

Conclusion

The rejection of claims 1-5, 8 and 12-17 as being unpatentable over Fontaine in view of Pierce is affirmed with respect to claims 1, 2, 5, 8, 12, 13 and 15-17, but is reversed with respect to claims 3, 4 and 14.

The rejection of claims 6 and 7 as being unpatentable over Fontaine in view of Pierce and Ryburn is affirmed.

The rejection of claims 9, 10 and 18 as being unpatentable over Fontaine in view of Pierce and Graham is reversed.

The decision of the examiner is affirmed-in-part.

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

AFFIRMED-IN-PART

CHARLES E. FRANKFORT
Administrative Patent Judge

LAWRENCE J. STAAB
Administrative Patent Judge

JEFFREY V. NASE
Administrative Patent Judge

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