

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 54

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* MASASHI NAGANO

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Appeal No. 96-4094  
Application 08/282,783<sup>1</sup>

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HEARD: FEBRUARY 8, 1999

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Before MEISTER, STAAB and GONZALES, *Administrative Patent Judges*.

STAAB, *Administrative Patent Judge*.

DECISION ON APPEAL

This is a decision on an appeal from the examiner's final

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<sup>1</sup> Application for patent filed July, 25, 1994. According to appellant, the application is a continuation of Application 08/034,213, filed March 19, 1993, now abandoned, and a continuation of Application 07/633,767, filed December 26, 1990, now abandoned.

Appeal No. 96-2094  
Application 08/282,783

rejection of claims 2, 3 and 5-14. No other claims are pending in the application. An amendment filed subsequent to the final rejection (Paper No. 40, filed October 13, 1995) effecting several minor changes in claim language has been approved for entry by the examiner (see advisory letter (Paper No. 42, mailed November 14, 1995)); however, the amendment has not been clerically entered. The examiner should attend to this matter when the application is returned to his jurisdiction.

Appellant's invention pertains to a control lever for controlling a cable actuated brake of a bicycle, and in particular to a control lever wherein the force transmitted to the cable by the lever varies in accordance with the position of the lever. Claim 12 is representative of the appealed subject matter and reads as follows:<sup>2</sup>

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<sup>2</sup> In claims 3 and 9, next to the last line of each, "divided" should be inserted after "cable" to improve the readability of the claim. In claim 12, we understand "the stroke start end" and "the stroke finish end" in the last two lines thereof as referring to, respectively, the "stroke start position" and the "stroke end position" recited earlier in the claim. In claim 10 "said cable connecting portion" should be changed to "said cable connector" for consistency with the terminology employed in claim 12, from which claim 10 ultimately depends. In claim 13, line 20, "the cable

12. A brake control apparatus for a bicycle comprising:

a lever axis;

a control cable;

a control lever pivotable about the lever axis between a stroke start position and a stroke end position;

a guide cam surface; and

a cable connector coupled to the control cable and disposed within the guide cam surface, wherein the guide cam surface is arranged so that a distance between the cable connector and the lever axis decreases and then increases as the control lever moves between the stroke start end and the stroke finish end.

The references of record relied upon by the examiner in support of rejections under 35 U.S.C. § 102(b) and 35 U.S.C. § 103 are:

Bourret	4,889,610	Feb. 13, 1990
Leleu <sup>3</sup> (French Patent Document)	1,210,326	Mar. 8, 1960

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connector" should be changed to "the cable connecting portion," again for consistency with the terminology employed earlier in that claim. While these minor errors do not obscure the metes and bounds of the claims, correction thereof is recommend in the event of further prosecution.

<sup>3</sup> Our understanding of this foreign language reference is derived from a translation prepared in the Patent and Trademark Office. A copy of that translation is attached to this decision.

The following rejections are before us for review:

(a) claims 2, 3, 5 and 7-14, under 35 U.S.C. § 112, first paragraph, as being based on a specification that "fail[s] to provide an adequate written description of the invention . . . and . . . does not provide support for the invention as is now claimed" (final rejection, page 4);

(b) claims 2, 3, 5-14, under 35 U.S.C. § 112, second paragraph, "as being indefinite" (final rejection, page 6) and "as *prolix* since they contain long recitations or unimportant details which hide or obscure the invention" (final rejection, page 7);

(c) claims 2, 3 and 6-14, under 35 U.S.C. § 102(b), as being anticipated by Leleu;

(d) claims 2, 3 and 5-14, under 35 U.S.C. § 103, as being unpatentable over Leleu; and

(e) claims 2, 3, 5 and 7-14,<sup>4</sup> under 35 U.S.C. § 103 as being unpatentable over Leleu in view of Bourret.

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<sup>4</sup> In that claim 6 was rejected as being unpatentable over Leleu alone in rejection (d), it is not clear why it was not included in this rejection.

Appeal No. 96-2094  
Application 08/282,783

The rejections are explained in the final rejection (Paper No. 37, mailed June 13, 1995) and the examiner's answer (Paper No. 44, mailed December 13, 1995).

The opposing viewpoints of appellant are set forth in the brief (Paper No. 43, filed November 1, 1995) and the reply brief (Paper No. 45, filed February 13, 1996).

*The 35 U.S.C. § 112, first paragraph, rejection*

Looking at the examiner's rejection of claims 2, 3, 5 and 7-14 under 35 U.S.C. § 112, first paragraph, we initially note that the description requirement found in the first paragraph of 35 U.S.C. § 112 is separate from the enablement requirement of that provision. *See, for example, Vas-Cath, Inc. v.*

*Mahurkar*, 935 F.2d 1555, 1560-64, 19 USPQ2d 1111, 1114-17 (Fed. Cir. 1991) and *In re Wilder*, 736 F.2d 1516, 1520, 222 USPQ 369, 372 (Fed. Cir. 1984), *cert. denied*, 469 U.S. 1209 (1985). In the present instance, we understand the examiner's rejection to be based on the description requirement of the

Appeal No. 96-2094  
Application 08/282,783

first paragraph.

With respect to the description requirement found in the first paragraph of 35 U.S.C. § 112,

[t]he test for determining compliance with the written description requirement is whether the disclosure of the application as originally filed reasonably conveys to the artisan that the inventor had possession at that time of the later claimed subject matter, *rather than the presence or absence of literal support in the specification for the claim language*. The content of the drawings may also be considered in determining compliance with the written description requirement.

*In re Kaslow*, 707 F.2d 1366, 1375, 217 USPQ 1089, 1096 (Fed. Cir. 1983) (citations omitted; emphasis added).

After review of appellant's specification and drawings as originally filed, it is our determination that such specification and drawings, although not a model of clarity, nevertheless do describe or otherwise provide "written description" support for the presently claimed subject matter. The examiner's primary concerns (final rejection, pages 3-5) in this matter appear to be founded on an alleged lack of adequate written description for the claim terminology calling

Appeal No. 96-2094  
Application 08/282,783

for (1) a distance between the cable connector and the lever axis that decreases and then increases as the control lever moves, and (2) the control lever moving between stroke start and stroke finish ends. The examiner's concerns are unfounded. The specification at page 10, lines 11-19, page 11, line 14 through page 12, line 1, and page 19, lines 1-5 satisfies the § 112, first paragraph, description requirement with respect to (1). The discussion on page 16 of the specification concerning the stroke start position and the stroke finish position and how these positions may be adjusted satisfies the § 112, first paragraph, description requirement with respect to (2). Accordingly, we will not sustain this rejection.

*The 35 U.S.C. § 112, second paragraph, rejection*

Turning to the examiner's rejection of claims 2, 3 and 5-14 under 35 U.S.C. § 112, second paragraph, we make note that the second paragraph of 35 U.S.C. § 112 merely requires that the claims define the metes and bounds of the invention with a reasonable degree of precision and particularity. In

Appeal No. 96-2094  
Application 08/282,783

evaluating a claim for compliance with the second paragraph of § 112, the content of the claim must be analyzed, not in a vacuum, but always in light of the teachings of the prior art and of the particular application disclosure as it would be interpreted by one possessing the ordinary level of skill in the pertinent art. See *In re Johnson*, 558 F.2d 1008, 1016, 194 USPQ 187, 194 (CCPA 1977).

In that light, in this particular case we believe that one of ordinary skill in the art viewing the applied prior art and appellant's disclosure, would understand the scope of appellant's independent claims 12 and 13. While the examiner makes much of the language "a distance between the cable connector and the lever axis" found in claim 12 and the similar language appearing in claim 13, we are convinced that the ordinarily skilled artisan would understand this terminology to be a reference to the

variable distance separating the lever shaft 3 and cam follower 16 as the lever moves through its stroke.

Similarly, the examiner's contention that the presence of the terms "pivotable" in claim 12 and "movable" in claim 13

Appeal No. 96-2094  
Application 08/282,783

makes the claims indefinite "since it is impossible to determine whether the claimed control lever 4 is structurally required to be pivoted and moved through a cable pulling stroke *based on the context of the claims per se*" (answer, page 8; emphasis in original) is not well taken. First, the contention is founded on the erroneous assumption that claims should be read in a vacuum. However, as noted above, in evaluating a claim for compliance with the second paragraph of § 112, the content of the claims must be analyzed in light of the underlying application disclosure as it would be interpreted by the ordinarily skilled artisan. *In re Johnson*, 558 F.2d at 1016, 194 USPQ at 194. Second, the examiner appears to be of the view that the use of functional language in claim drafting is per se improper. However, there is nothing intrinsically wrong with claiming something in terms of what it does rather than what it is. *In re Swinehart*, 439 F.2d 210, 212, 169 USPQ 226, 228 (CCPA 1971). While the appealed claims may not employ language preferred by the examiner, this circumstance does not make them indefinite. Instead, it simply makes them broad. Breadth, however, is not

Appeal No. 96-2094  
Application 08/282,783

to be equated with indefiniteness. *See, for example, In re Miller*, 441 F.2d 689, 693, 169 USPQ 597, 600 (CCPA 1971).

As to the examiner's concerns regarding terms such as "the stroke start end" and "the stroke finish end" in claim 12, "a guide cam surface" in claims 6 and 12, and "a slot" in claim 13, this basis for the rejection under § 112, second paragraph, does not appear to come from any particular difficulty with the terminology employed in the claims but, instead, seems to be based upon the examiner's opinion that there may be no strict antecedent basis in the specification and/or preceding claim language for the terms in question. While we appreciate the examiner's concerns in this regard, it is our view that the minor inconsistencies in claim language noted by the examiner are not such to prevent one of ordinary skill in the art from understanding the metes and bounds of independent claims 6, 12 and 13, or claim 2, 7 and 8 that dependent from claim 12, especially when the claim language is read in light of appellant's specification as a whole.<sup>5</sup>

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<sup>5</sup> Pursuant to 37 CFR § 1.75(d)(1), the examiner may wish to have appellant amend the specification to provide antecedent basis therein for any terms in the claims that the examiner regards as lacking such support.

Appeal No. 96-2094  
Application 08/282,783

On page 7 of the final rejection, the examiner states that the appealed claims "are rejected as *prolix* since they contain long recitations or unimportant details which hide or obscure the invention. See MPEP 706.03(g)." We simply do not agree with the examiner's generalized assertion that the claims are confusing because of their length or because they recite unspecified "unimportant details." Furthermore, the section of the manual cited by the examiner in support of this rationale no longer appears in the latest revision thereof. Accordingly, the examiner's "prolix" rationale is not well taken.

In light of the foregoing, we will not sustain the standing 35 U.S.C. § 112, second paragraph, rejection of claims 2, 6-8, 12 and 13.

We reach an opposite conclusion with respect to claims 3 and 9. Claim 12, from which each of these claims ultimately depends, calls for a brake control apparatus comprising a guide cam surface (element 15) and a cable connector (element 13, 16, 17) coupled to a control wire and disposed in the guide cam surface so that the distance between the cable connector and the lever axis decreases and then increases as

Appeal No. 96-2094  
Application 08/282,783

the control lever pivots. Each of claims 3 and 9 adds to the claim 12 apparatus "a force

transmission ratio adjuster mechanism" for effecting a change in the force applied to the cable by the lever as the lever pivots. It is not clear whether the force transmission ratio adjuster mechanism of claims 3 and 9 is the same as the guide cam surface and cable connector of claim 12, a mechanism in addition to and independent of these elements, or a mechanism that includes the guide cam surface and cable connector as well as other unspecified additional elements. We therefore will sustain the standing 35 U.S.C. § 112, second paragraph, rejection of claims 3 and 9, as well as claims 5, 10, 11 and 14 that depend therefrom.

*The rejections based on prior art*

Considering next the examiner's anticipation rejection of claims 2, 3 and 6-14 based on Leleu, independent claim 12 requires that the guide cam "is arranged so that a distance between the cable connector and the lever axis decreases and then increases as the control lever moves between the stroke start end and the stroke finish end." Independent claims 6

and 13 contain similar language. The examiner contends on page 8 of the final rejection that "[t]he functional statement[s] such as 'whereby', 'so that' and 'wherein' clauses in claims 6, 12-14 cannot serve to distinguish claims, which are not process claims, from [the] reference since it does not [sic, they do not] define any structure." The examiner also contends on page 10 of the answer that "Leleu's guide cam surface [5c or 13b] is similar to appellant's guide cam surface, thus, it inherently achieves the same 'interrelationship of components' [called for] in appellant's claims." We do not agree with either contention.

First, the examiner's contention that the "so that" clause in claim 12, and the similar language in claims 6 and 13, cannot serve to distinguish over the prior art is incorrect. *See, for example, In re Swinehart*, 439 F.2d at 212, 169 USPQ at 228-29 (" . . . any concern over the use of functional language at the so-called point of novelty . . . to distinguish over a reference disclosure by emphasizing a property or function which may not be mentioned by the reference . . . is misplaced."). Second, the examiner's contention that Leleu's guide cam surface 5c or 13b is

Appeal No. 96-2094  
Application 08/282,783

inherently capable of functioning in the manner called for in the claims because the reference cam surface is "similar to" appellant's guide cam likewise is not well taken. The examiner has not set forth any evidence or sound technical reasoning to establish the reasonableness of his conclusion that the asserted characteristic will necessarily occur in the operation of Leleu's device and, in our opinion, the shape of Leleu's cam surfaces as

illustrated in the drawings is such that the operation called for in the claims will not occur. Hence, we will not sustain the examiner's anticipation rejection of claims 2, 3 and 6-14 based on Leleu.

Turning to the obviousness rejection of the appealed claims based on Leleu alone, we appreciate that Leleu discloses a control lever for controlling a cable actuated brake of a bicycle wherein guide cam surface 5c or 13b thereof may be given a profile to achieve a relatively large displacement of the cable per unit rotation of the lever at the beginning of the lever's stroke and a smaller displacement of the cable per unit rotation of the lever at the end of the

Appeal No. 96-2094  
Application 08/282,783

lever's stroke. We also appreciate that Leleu broadly teaches that this cam profile may be modified to fine tune the cable actuator to a particular situation (see, for example, page 7, lines 15-21, of the translation). However, we do not agree with the examiner that these broad teachings would have suggested to one of ordinary skill in the art a guide cam surface wherein the distance between the cable connector and the lever axis first decreases and then increases during the stroke of the lever, as now claimed, since this type of arrangement would run counter to the type of

operation desired by Leleu (translation, page 7, lines 6-9) wherein displacement of the cable relative to lever movement is smallest at the end of the lever's stroke. Accordingly, we will not sustain the standing § 103 of claims 2, 3, 5-14 as being unpatentable over Leleu.

As to the standing § 103 rejection based on Leleu in view of Bourret, Bourret pertains to a two-stage throttle control lever for a recreational vehicle such as a snowmobile. The primary object of Bourret (column 1, lines 12-44) is to provide a throttle control lever wherein the throttle

Appeal No. 96-2094  
Application 08/282,783

mechanism requires a lower force to be applied by the operator during the normal operating range of the throttle lever to thereby prevent undue fatigue to the operator, even at the expense of a much greater force being required at high throttle openings corresponding to high speed operation which is typically encountered for only relatively short intermittent periods of time. To this end, in a first stage of operation of Bourret's device corresponding to normal cruising speeds, the throttle lever 26 pivots about a first pivot axis 31 wherein the mechanical advantage of the manual actuating force is relatively high, thereby requiring less input force by the operator, whereas in a second stage of operation corresponding to high speed operation, the throttle lever pivots about a second pivot axis 30 wherein the mechanical advantage of the manual actuating force is much smaller, thus requiring a higher input force by the operator.

Based on the dissimilarity of purpose and operation of the applied references, it is not apparent to us why one of ordinary skill in the art would turn to Bourret's two-stage throttle control lever in the first instance for guidance in

Appeal No. 96-2094  
Application 08/282,783

modifying the Leleu device. However, even if the ordinarily skilled artisan were to modify Leleu in view of Bourret's teachings, the claimed subject matter would not result. In this regard, neither of the applied references discloses, suggests or implies a control lever for controlling a cable wherein the distance between the cable connector and the lever axis first decreases and then increases during the stroke of the lever. It follows that we will not sustain the standing rejection of claims 2, 3, 5 and 7-14 as being unpatentable over Leleu in view of Bourret.

In summary, the rejection of claims 2, 3, 5-14 under 35 U.S.C. § 112, second paragraph, (rejection b) is reversed as to claims 2, 6-8, 12 and 13, but is affirmed as to claims 3, 5, 9-11 and 14. All other rejection are reversed.

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*

Appeal No. 96-2094  
Application 08/282,783

JAMES M. MEISTER	)	
Administrative Patent Judge	)	
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LAWRENCE J. STAAB	)	BOARD OF PATENT
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	)	INTERFERENCES
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Appeal No. 96-2094  
Application 08/282,783

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