

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.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. 12

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte RODNEY G. POWERS
and ROBERT M. LANGLEY

Appeal No. 2004-0618
Application 10/021,790

ON BRIEF

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

DECISION ON APPEAL

Rodney G. Powers et al. originally took this appeal from the final rejection of claims 6 through 10, all of the claims pending in the application. As the examiner has since withdrawn all rejections of claims 7 and 10, which now stand objected to as depending from a rejected base claim, the appeal as to these claims is hereby dismissed, leaving for review the standing rejections of claims 6, 8 and 9.

THE INVENTION

The invention relates to a inspection device for measuring deformation in a pipeline. Representative claim 6 reads as follows:

6. A pipeline inspection device allowing a user to employ a focused light source to visibly inspect for deformation of a pipeline, with said pipeline having an internal diameter generally composed of a bottom region, a first side region, a second side region, and a top region, and having a horizontal diameter and a vertical diameter, comprising:

a. a base portion, having a forward end and a rear end, configured to move along said bottom region of said internal diameter so that it lies on said vertical diameter;

b. a vertical test arm, having a forward end and a rear end, oriented vertically, and being mounted to said base portion by conventional flexible means, so that said vertical test arm lies on said vertical diameter, with a portion of said vertical test arm extending outward far enough from said base portion to contact said top region of said internal diameter, and wherein said vertical test arm is free to elastically move downward when said inspection device encounters a reduction in said vertical diameter of said pipeline; and

c. reflective means changeable in response to said downward movement of said vertical test arm, so that said user can direct said focused light source toward said reflective means and thereby observe the state of said reflective means when said pipeline inspection device is far from said user, thereby indicating to said user any downward movement of said vertical test arm.

THE REJECTIONS

Claims 6, 8 and 9 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,085,510 to Kirschke, and in the alternative under 35 U.S.C. § 103(a) as being obvious over Kirschke.

Appeal No. 2004-0618
Application No. 10/021,790

Attention is directed to the brief (Paper No. 9) and answer (Paper No. 10) for the respective positions of the appellants and examiner regarding the merits of these rejections.¹

DISCUSSION

Kirschke discloses "[a]n elongated skid mounted measuring device for utilization in conjunction with a closed circuit TV camera for accurately determining variations in the internal diameter of a conduit" (Abstract). A first embodiment (see Figures 1 and 2) comprises a tubular central body 10 mounted on skids 25 and 26, a spring steel deflection arm 37 attached at one end to the central body, a metal ruler 40 fixed to the free end of the deflection arm, a ruler slide 41 connected to the central body for slidably receiving the ruler, and an internal closed circuit TV camera 56 and illumination light means 57 focused on the ruler and ruler slide to observe changes in the relative positions of the two caused by movement of the deflection arm in response to variations in the internal diameter of the conduit. A second embodiment (see Figures 3 through 5) includes a tubular

¹ In the final rejection (Paper No. 7), claims 6, 8 and 9 additionally stood rejected, along with claims 7 and 10, under both the first and second paragraphs of 35 U.S.C. § 112. The examiner subsequently withdrew these rejections (see page 2 in the answer) in light of the arguments advanced in the appellants' brief.

central body 10', skids 25 and 26, a rigid deflection arm 37' pivotally attached at one end to the central body, a spring 46 biasing the free end of the deflection arm away from the central body, a ruler 40' disposed on the free end of the deflection arm, a ruler reference 52 connected to the central body for receiving the ruler, and an external closed circuit TV camera 56 and illumination light means 57 focused on the ruler and ruler reference to observe changes in the relative positions of the two caused by movement of the deflection arm in response to variations in the internal diameter of the conduit.

As framed by the appellants (see pages 6 through 9 in the brief), the dispositive issue with respect to the examiner's rejections is whether Kirschke teaches, or would have suggested, a pipeline inspection device responsive to the "reflective means" limitation in representative claim 6.² With regard to the § 102(b) rejection, the appellants submit that "Kirschke has no reflective indicating means at all" (brief, pages 6 and 7) and that "Kirschke's light, camera, and ruler do not comprise a 'reflecting [sic, reflective] means' as that term is understood within the context of the present invention" (brief, page 7). As for the § 103(a) rejection, the appellants expand upon this line

² Claims 8 and 9 depend from claim 6.

Appeal No. 2004-0618
Application No. 10/021,790

of argument by discussing the reflector system illustrated in Figures 16 through 18 and 21 through 23 of their application and urging that

[t]he invention uses no electronics of any kind. Specifically, it uses no light, video cameras, or electrical connections. The purely mechanical nature of the invention is one of its greatest strengths, given the difficult environment in which it functions.

The PTO has not made a prima facie showing that the elements disclosed in Kirschke render the reflector system shown in the present invention obvious. If anything, Kirschke's use of complex electronics teaches away from the present invention [brief, pages 8 and 9].

The examiner, on the other hand, considers the "reflective means" limitation in claim 6 to be met by Kirschke's metal ruler 40 and ruler slide 41 (see pages 3 through 6 in the answer).

The claim language at issue is in means-plus-function format and hence must be construed under 35 U.S.C. § 112, sixth paragraph, to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.

King Instrument Corp. v. Perego, 65 F.3d 941, 945-46, 36 USPQ2d 1129, 1131-32 (Fed. Cir. 1995). For a means-plus-function limitation to read on a device, the device must employ means identical or equivalent to the corresponding structures, materials, or acts described in the specification and must also perform the identical function as specified in the limitation.

Id.

In the present case, Kirschke's metal ruler 40 and ruler slide 41 perform the identical function specified by the limitation at issue, i.e., they are reflective and changeable in response to downward movement of the vertical test arm (Kirschke's deflection arm 37) so that a user can direct a focused light source (Kirschke's light means 57) toward them and observe (via Kirschke's camera 56) their state when the pipeline inspection device is far from the user, thereby indicating to the user any downward movement of the vertical test arm. Clearly, if the metal ruler 40 and ruler slide 41 were not reflective as argued by the appellants, they could not be illuminated by the light means 57 and observed by the camera 56. The examiner has found (1) that the vertical flag 70 and vertical indicators 72 described in the appellants' specification embody structure corresponding to the "reflective means" recited in claim 6,³ and (2) that the metal ruler 40 and ruler slide 41 taught by Kirschke constitute an equivalent of this disclosed structure. Both of these findings are manifestly reasonable on their face and have not been cogently disputed by the appellants.

³ In making this finding (see pages 4 and 5 in the answer), the examiner at times erroneously refers to reference numerals 66 and 68, which denote the lateral flag and lateral indicators disclosed by the appellants.

Appeal No. 2004-0618
Application No. 10/021,790

Furthermore, there is nothing in the "reflective means" limitation, or anywhere else in claim 6, which excludes or is otherwise inconsistent with Kirschke's light means, TV camera, or the electrical connections attendant thereto.

In light of the foregoing, the appellants' position that the examiner's rejections are unsound because Kirschke does not teach, and would not have suggested, a pipeline inspection device responsive to the "reflective means" limitation in claim 6 is not persuasive. We shall therefore sustain the standing 35 U.S.C. § 102(b) rejection of claims 6, 8 and 9 as being anticipated by Kirschke and the alternative 35 U.S.C. § 103(a) rejection of claims 6, 8 and 9 as being obvious over Kirschke.

SUMMARY

The decision of the examiner to reject claims 6, 8 and 9 is affirmed.

Appeal No. 2004-0618
Application No. 10/021,790

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

AFFIRMED

| | | |
|-----------------------------|---|-----------------|
| IRWIN CHARLES COHEN |) | |
| Administrative Patent Judge |) | |
| |) | |
| |) | BOARD OF PATENT |
| |) | |
| |) | APPEALS AND |
| LAWRENCE J. STAAB |) | |
| Administrative Patent Judge |) | INTERFERENCES |
| |) | |
| |) | |
| |) | |
| |) | |
| JOHN P. MCQUADE |) | |
| Administrative Patent Judge |) | |

JPM/kis

Appeal No. 2004-0618
Application No. 10/021,790

JOHN WILEY HORTON, ATTORNEY
PENNINGTON, MOORE,
WILKINSON, BELL & DUN
2ND FLOOR
215 S. MOORE STREET
TALLAHASSEE, FL 32301