

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today is *not* binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte ALEXANDER ZAZOVSKY

Appeal 2007-1101
Application 10/248,535
Technology Center 2800

Decided: July 18, 2007

Before JAMES D. THOMAS, JOSEPH L. DIXON, and ALLEN R.
MACDONALD, *Administrative Patent Judges*.

THOMAS, *Administrative Patent Judge*.

DECISION ON APPEAL

This appeal involves claims 1 through 5, 8 through 13, 15 through 19, 21, 22, and 28 through 30, the record reflecting that the Examiner has set

forth objections to claims 6, 7, 14, 20, and 23 through 27. We have jurisdiction under 35 U.S.C. §§ 6(b) and 134(a). An oral hearing on this appeal was conducted on Tuesday, July 10, 2007.

As best representative of the disclosed and claimed invention, representative independent claim 1 is reproduced below:

1. An apparatus for measuring the pressure of an underground formation penetrated by a wellbore, comprising:

a housing positionable in the wellbore;

a probe operatively connected to said housing, said probe positionable in sealing engagement with a sidewall of the wellbore;

a piston contained in said probe and axially movable therein, said piston having an end positionable adjacent the sidewall of the wellbore and retractable therefrom whereby a cavity is defined for receiving fluid from the formation;

an oscillator operatively connected to the piston for fluctuating the fluid in the cavity; and

a gauge for measuring the pressure of fluid in the cavity.

The following references are relied on by the Examiner:

Brieger	US 3,934,468	Jan. 27, 1976
Proett	US 5,703,286	Dec. 30, 1997
Georgi	US 5,770,798	Jun. 23, 1998
Ciglenec	US 6,164,126	Dec. 26, 2000
Meister	WO 02/08571 A1	Jan. 31, 2002

All claims on appeal stand rejected under 35 U.S.C. § 103. As evidence of obviousness as to claims 1 through 5, 8 through 13, 15, 16, and 28 through 30, the Examiner relies upon Ciglenec in view of Meister in a

first stated rejection. To this combination of references, the Examiner first adds Proett as to claims 17 through 19, then adds Brieger as to claim 21, and lastly, separately adds Georgi as to claim 22.

Rather than repeat the positions of the Appellant and the Examiner, reference is made to the Brief and Reply Brief for Appellant's positions, and to the Answer for the Examiner's positions.

OPINION

For the reasons set forth by the Examiner in the Answer, as exemplified here, we sustain each of the four separately stated rejections of the claims on appeal under 35 U.S.C. § 103.

Appellant presents arguments only as to independent claims 1, 12, and 30 within the first stated rejection and presents no arguments as to any dependent claim from any of them rejected within this first stated rejection. Likewise, Appellant presents no arguments as to the second through fourth stated rejections. Where the Examiner relies upon additional prior art in the second through fourth stated rejections, Appellant presents arguments consistent with and relying upon the arguments presented as to respective parent independent claims 1, 12, and 30 in the first stated rejection. Only a general argument that the additional prior art to Brieger and Georgi respectively teach away from Appellant's claimed invention is made without any development of this position. We therefore agree with the Examiner's observations with respect to these rejections beginning at page 11 of the Answer where the Examiner notes again that the newly added prior art to Proett, Brieger, and Georgi do teach the features recited in the claims rejected. These observations are not contested in the Reply Brief.

In rejecting claims under 35 U.S.C. § 103, it is incumbent upon the Examiner to establish a factual basis to support the legal conclusion of obviousness. *See In re Fine*, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the Examiner must make the factual determinations set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 17, 148 USPQ 459, 467 (1996). “[T]he Examiner bears the initial burden on review of the prior art or on any other ground, of presenting a *prima facie* case of unpatentability.” *In re Oetiker*, 977 F.3d 1443, 1445, 24 USPQ 1443, 1444 (Fed. Cir. 1992). Furthermore, “‘there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness’ [H]owever, the analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ.” *KSR Int’l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1741, 82 USPQ2d 1385, 1396 (2007) (quoting *In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006)). The Examiner’s extensive reasoning in the Answer is consistent with and follows this analytical framework.

The disclosed invention in Figures 3A, 3B illustrate a probe 200a within which is a piston 215a, further within which is the oscillator 300 which is stated at Specification page 10 to be either a prior art piezoelectric or magnetostrictive device. These elements are not recited in the independent claims on appeal. The invention as first characterized in the first paragraph [0014] of the Summary of the Invention at Specification page 5 states that the “tool can be a combination of a conventional probe and an oscillator (transducer with an oscillating vibration).” Again, this feature is

not recited in the independent claims before us. Moreover, when questioned at oral hearing what the meaning is of the term “fluctuations” as disclosed, Appellant’s representative indicated that the Specification does not define this term. Likewise, there is no claimed rapid movement of the oscillator and it appears to not be disclosed in this manner.

On the other hand, the actual recitations of the argued oscillator, the feature primarily argued by Appellant in the Brief and Reply Brief as recited in each independent claim 1, 12, and 30, is not coextensive with the disclosed invention. Claim 1 recites “an oscillator operatively connected to the piston for fluctuating the fluid in the cavity.” Claim 12 recites “selectively activating an oscillator to fluctuate the fluid in the cavity” where the oscillator is merely passively recited. Lastly, in independent 30 there is recited “an oscillator axially movable in the cavity for fluctuating the fluid in the cavity.” Thus, none of the independent claims on appeal require the oscillator to be within the probe or otherwise within the piston as disclosed.

In claim 1, the oscillator is merely operatively connected to the piston. There is no positive recitation of an oscillator in the method in independent claim 12 in contrast to the positive recitation of the probe and the piston within it in this claim. As to independent claim 30, the oscillator is merely stated to be selectively positionable within the cavity. In each of these independent claims, the function of fluctuating the fluid in the cavity is recited.

Although the Examiner’s position is of the view that Ciglenec does not teach the oscillator or the like, it appears to us from our studied review of this reference that the respective teachings and showings of the respective elements within the probe 16 in Figures 2 and 3 of the first embodiment,

probe 216 in Figure 4 of the second embodiment, and probe 316 within the third embodiment in Figure 5 has elements disclosed which are operatively connected to the piston for fluctuating the fluid within the cavity as in independent claim 1, permit selective activation of elements associated with the piston within each of these probes such as to fluctuate the fluid in the cavity as well as having elements which are selectively positioned within a cavity for fluctuating the fluid in the same cavity as recited respectively in independent claims 1, 12, and 30 on appeal.

The actuating means of the Abstract in Ciglenec is also utilized within the Summary of the Invention discussion at column 3, lines 31 through 56, to perform this function. Within Figure 2 and the various parts of Figure 3 there is no dispute that the probe 16 includes a piston 51, best shown in Figure 3C, and labeled as pin 51 within the teachings of this reference. Additionally, there is disclosed a piston 70 and hydraulic valves 61, 63 which functionally operate by means of hydraulic fluid passage 29 in the various figures according to the hydraulic system 28 in Figure 2. The piston 70 within the probe 16 is shown in Figure 3A in a withdrawn, retracted position and a piston 51 within it is shown in a forward position. Figure 3B shows the piston 70 in an advanced or forward position, again with the piston 51 within it in a forward position. The same may be said of Figure 3C. In Figure 3D, the piston 70 remains in the forward position and the piston 51 within it has been moved back within piston 70 such as to permit the pressure of the formation to be measured by the pressure sensor 54 according to the discussion of Figure 2 beginning at column 5. Through the discussion of the various portions of Figure 3, the piston 51 within the piston 70 operates in an oscillatory manner. They start in a retracted position, are

respectively actuated to an extended position and then are advanced backwardly to a retracted position to perform an oscillatory-type function through the discussion at column 8. Again, the hydraulic fluid conductors 28 and 29 cause the valves 61, 63 to actuate in such a manner through the additional operative actions of the valve 92 and the spring 120 such as to fluctuate the fluid within the cavity 50a, 50b formed through the port 48 where the formation materials enter for measuring the pressure thus forming a cavity or passageway 50a, 50b for measurement by pressure sensor 54.

Corresponding operations occur with respect to the second embodiment in Figure 4 and the third embodiment in Figure 5. Of significant emphasis here is that these back and forth oscillatory actions are repetitive according to the teachings at column 14, lines 43 through 54 at different times or different depths.

Therefore, the artisan may well consider that Ciglenec may teach more than the Examiner has realized and perhaps the substance of each independent claim 1, 12, and 30. Indeed, the probe 16 in Ciglenec corresponds to the disclosed probe 200a in disclosed Figures 3A, 3B; Ciglenec's piston 70 corresponds to Appellant's disclosed piston 215a and Ciglenec's piston/pin 51 corresponds to Appellant's disclosed oscillator 300.

Correspondingly, we agree with the Examiner's views with respect to Meister that there is no dispute that element 220 comprises the probe, which is characterized in this reference as the pad member. A draw piston 236 is characterized by the Examiner as a retractable piston. In Figure 3 of Meister, the probe 220 is in a retracted position with the piston 236 within it in a forward position. In Figure 4, the probe 220 is extended where the piston 236 remains in the forward position. In Figure 5 of Meister, the probe

220 remains in the extended position with piston 236 having been retracted. In Figure 6, the probe 220 remains in the extended position and the piston 236 has again been moved forward to the position it was in in Figures 3 and 4. This back and forth movement clearly illustrates an oscillatory function which causes fluid to enter the associated cavity for measurement purposes. These movements are controlled through the control lines 312-318 to selectively control both the extension and retraction of the probe 220 as well as the position of the piston 236 being in a forward or backward position within the probe 220. Modifying embodiments are shown in Figures 7 and 8 of Meister. This back and forth movement of these elements is revealed in the Summary of the Invention at Meister's page 4, lines 4 through 33; page 13, lines 12 through 33; page 14, line 25 through page 15, line 2; and the discussion at page 15, line 20 through page 16, line 20 associated with Figure 9.

As relied upon by the Examiner, the discussion at page 13 clearly indicates that the piston reciprocates through a line of travel linearly or otherwise is translated along the longitudinal axis. The Figure 9 discussion, and particularly that at page 15, lines 25 through 31, illustrates that various piston draw rates are utilized and are adjustable in steps to yield a plurality of measurements at each step. Even the characterization of Figure 9 at line 32 of page 15 indicates that this figure represents a single cycle of a drawdown test. The Examiner's characterization at pages 9 and 10 of Meister's action of a "cycle" having a drawdown portion and a build up portion is consistent with these showings and discussions in Meister. Thus, the reference plainly teaches oscillations (back and forth cycles) that are derived from the actuations of the hydraulic system through the various

control lines noted earlier. These views at pages 9 and 10 of the Answer have not been questioned or challenged by Appellant in the Reply Brief. Thus, the Examiner's views in the Answer that there are corresponding teachings of Ciglenec and Meister leading the artisan to prefer the advantageous approaches followed by Meister and the system of Ciglenec are well founded. In addition to the advantages discussed at page 16, lines 19 through 26, of improving the accuracy of the overall determination of parameter such as pressure parameters noted by the Examiner, we observe page 3, line 30 through page 4, line 3, indicates that Meister's advantages include reducing the time required for taking samples and measurements and reducing the risk of system clogging. Further advantages are noted at page 18, lines 18 through 21, which indicate that Meister's invention provides a faster evaluation of formations by using variable rates of piston drawdown and pressure build up in his various embodiments.

Thus, these observations in addition to those of the Examiner provide strong basis within 35 U.S.C. § 103 for the combination of the teachings of Ciglenec and Meister notwithstanding Appellant's arguments in the Brief and Reply Brief to the contrary. We strongly believe that the artisan would not characterize the teachings of Meister, and for that matter those of Ciglenec, as not teaching the claimed oscillator since an examination from an artisan's perspective of the teachings and showings of both references clearly would have led the artisan to have concluded otherwise. In a similar manner, to the extent argued in the Brief and Reply Brief that the references teach away from their combinability, it is noted first that this is merely an allegation with no developed reasoning, and we have found no evidence, teaching or statement in either reference that would have discouraged the

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artisan from following the path set out in the references or would have led in a direction diverging from that path actually taken by Appellant.

In view of the foregoing, the decision of the Examiner rejecting all claims on appeal under 35 U.S.C. § 103 is affirmed.

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

AFFIRMED

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