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

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte RAY. P. VINCENT, FRANK KOEHRMANN,
GEORGE E. GIVENS, CHRISTIAAN D. KRAUSS, EDWARD T. WOOD,
FRIEDHELM MAKOHL and DAVID B. HAUGHTON

Appeal No. 2006-3061
Application No. 10/405,405
Technology Center 3600

HEARD: December 12, 2006

Before BAHR, NAPPI and HORNER, **Administrative Patent Judges**.

NAPPI, **Administrative Patent Judge**.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134 of the final rejection of claims 1 through 3. For the reasons stated *infra* we will not sustain the examiner's rejection of claims 1 through 3.

THE INVENTION

The invention relates to a method of well drilling which allows the drilling and cementing of the casing in a single trip. See page 2 of appellants' specification. Claim 1 is representative of the invention and is reproduced below:

> 1. A one trip drilling and casing cementing method, comprising:
> providing a drilling assembly on a drill string;
> supporting casing, defining a casing wall, from the drill string so that said drilling assembly extends below the lower end of the casing;
> lowering the drilling assembly and casing in one trip on said drill string;
> drilling the well while advancing the casing;
> delivering cement through at least one first opening in said casing wall; and
> forcing the cement into the annular space between the casing and the wellbore.

THE REFERENCES

The references relied upon by the examiner are:

Bailey	4,759,413	Jul. 26, 1988
Wardley	6,412,574	Jul. 2, 2002
		(Filed May 5, 2000)

THE REJECTION AT ISSUE

Claims 1 through 3 stand rejected under 35 U.S.C. § 103 as being unpatentable over Bailey in view of Wardley. The examiner's rejection is on pages 3 and 4 of the answer. Throughout the opinion we make reference to the briefs and the answer for the respective details thereof.

OPINION

We have carefully considered the subject matter on appeal, the rejection advanced by the examiner and the evidence of obviousness relied upon by the examiner as support for the rejection. We have, likewise, reviewed and taken into consideration, in reaching our decision, appellants' arguments set forth in the briefs along with the examiner's rationale in support of the rejection and arguments in rebuttal set forth in the examiner's answer.

With full consideration being given to the subject matter on appeal, the examiner's rejection and the arguments of appellants and the examiner, for the reasons stated *infra* we will not sustain the examiner's rejections of claims 1 through 3 under 35 U.S.C. § 103.

On page 2 of the brief, appellants assert that Wardley teaches a two trip system for drilling and cementing the casing. On page 3 of the brief, appellants assert that though Wardley teaches port collars in the casing, Wardley teaches that the drill string must be removed from the casing and a specialized cementing tool used to make use of the ports in the casing wall to cement the casing to the adjacent formations. On page 3, of the brief, appellants state that while Bailey teaches drilling and cementing the casing in one trip, Bailey performs the operation in a different manner. Appellants state

that Bailey teaches a system where the drill is raised in the casing, cement is delivered through the drill string and pressure is applied to deliver the cement to the annulus around the casing. Bailey raises the drill string in the casing so that if the pressure fails the drill will not be fouled by the cement. Appellants argue that Bailey has no use for holes in the casing wall to deliver cement. Further, on page 3 of the reply brief, appellants state that "[a]dding openings to the casing in Bailey from Wardley just makes no sense since it defeats the purpose of the internal pressurization of the casing so key to keeping the cement out of it. In short, the one trip system of Bailey becomes inoperative with the casing holes of Wardley."

On page 4 of the answer, in the statement of the rejection, the examiner asserts that "having openings in the wall of the casing would allow the cement to flow to the annulus more quickly and thus reduce the cementing time." Further, on pages 4 and 5 of the answer, the examiner, in response to appellants' arguments states:

> The appellant states the primary reference is [*sic*, in]support of the rejection is Wardley ' 574. This statement is incorrect. As disclosed in the final rejected [*sic*] dated October 7, 2004, the primary reference used in the rejection is Bailey '413. The Wardley '574 reference is the secondary reference. Therefore, the appellant's [*sic*] arguments are not responsive to the rejection on record. Clearly, the rejection using Bailey '413 in view of Wardley '574, as set forth in the above rejection, meets the limitations of the claimed invention and no substantial arguments are provided to the contrary.

We concur with appellants, and do not find that the combination of the references, regardless of which is relied upon as the primary teaching, renders the claimed subject matter obvious. Independent claim 1, recites "delivering cement through at least one first opening in said casing wall." As appellants assert, we find that Bailey teaches a method of drilling and cementing in one trip. Bailey teaches that the casing surrounds the drill and that during drilling the drill head and underreamer extend below the casing. See figures 1 and 2 and column 3, lines 35 through 55. When the well is drilled deep enough that the casing is fully lowered, the drill head is retracted up into the casing and cement is pumped through the drill string. Pressure is used (assumedly with a fluid which is less dense then the cement) to force the cement upward into the annulus of the casing, i.e. the cement flows out of the drill string, to the bottom of the casing, out the bottom end of the casing (which we do not consider to be an "opening" in the wall of the casing) and into the annulus between the casing and formation. See figure 3, and column 4, lines 42 through 50. Thus, as shown in figure 3, the cement item 40 fills the space between the casing and the surrounding formation, without filling the entire casing and without cementing the drill to the casing. The examiner's modification would not allow this process to occur. If ports were placed in the walls of the casing, pressure applied in the casing would not drive the cement up the annulus, between the casing and the formation, as shown in figure 3, rather the cement would just rise to the fill level of both the casing and annulus. Thus, we do not find that one of ordinary skill in the art would have been motivated to combine the references as

asserted by the examiner and we will not sustain the examiner's rejection of claims 1 through 3.

For the forgoing reasons, we will not sustain the examiner's rejections of claims 1 through 3, under 35 U.S.C. § 103. The decision of the examiner is reversed.

REVERSED

JENNIFER D. BAHR Administrative Patent Judge	)	
ROBERT E. NAPPI Administrative Patent Judge	)	BOARD OF PATENT APPEALS AND INTERFERENCES
LINDA E. HORNER Administrative Patent Judge	)	

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