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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.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. 14

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Ex parte WILLIAM H. REAMS, DOUGLAS M. HINELY, BRIAN L. WILL, LOUIS J. MONTESI, and GERALD R. LAIB

Appeal No. 97-3107
Application 08/520,976[1]

ON BRIEF

Before THOMAS, HAIRSTON, and KRASS, Administrative Patent Judges.

KRASS, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the final rejection of claim 1. Claim 12 has been indicated by the examiner as being allowable and is no longer before us on appeal. Claims 2 through 11 have also been allowed by the examiner.

The invention pertains to a safety arming system for an explosive device and, specifically to the arming of mines deployed into water from aircraft. The system employs a

[1] Application for patent filed August 24, 1995.

hydrodynamic piston to detect a high velocity of the delivery envelope, in which the arming device is installed, while the delivery envelope is traveling through the water. The detection of high velocity travel through the water is used to unlock a detonation explosive train which then, after an appropriate delay, removes electrical shorting of detonation, connecting the electrical firing circuit connection and completing the detonation path in order to "arm" the device in order to await a firing signal from a target detection device. By detecting water impact and high velocity, through water, of the delivery envelope, underwater explosive weapon deployment by aircraft delivery is improved such that arming in response to dry land impact is avoided and reduction in altitude and a decrease in flight speed from conventional limits is said to be achieved.

Claim 1 is reproduced as follows:

1. A safety arming system adapted to be installed within a delivery envelope together with an explosive device detonated in response to a firing signal from a target detector, said system comprising: means responsive to deployment of said delivery envelope for establishment of an armed condition therein; explosive path means operatively connected to the target detector for conducting said firing signal only in said armed condition to the explosive device; and environmental means responsive to detection of a high velocity of the delivery envelop [sic, envelope] during water travel for maintenance of a safe condition during which said establishment of the armed condition is prevented.

The examiner relies on the following reference:

Reams 5,005,482 Apr. 9, 1991

Claim 1 stands rejected under 35 U.S.C. ' 102(b) as anticipated by Reams.

Reference is made to the briefs and answer for the respective positions of appellants and the examiner.

OPINION

We reverse.

At issue here is whether or not Reams discloses the claimed "environmental means responsive to detection of a high velocity of the delivery envelop during water travel…"

Clearly, the disclosures of Reams and the instant application relate to different inventions, the former employing a hydrostatic sensor for detecting when the mine, descending vertically through the water, has settled into the water to a predetermined depth for exploding the mine when a target is detected and the latter directed to hydrodynamically sensing high velocity of the delivery envelope through the water along paths other than a vertical descent path before exploding the mine when a target is detected.

The question to be answered is whether the instant invention, as claimed, distinguishes over Reams. The examiner presents a compelling case as to the broad scope of the claim by suggesting that the pressure acting against the piston in Reams is inherently proportional to the velocity of the delivery

envelope during water travel. The specific language of claim 1, as written, certainly does not appear to require water travel other than in a vertical direction.

Without more, we would be inclined to agree with the examiner's conclusion of anticipation. However, we view appellants' argument, at page 2 of the reply brief, that the "environmental means" embodied in the system disclosed in the Reams patent is not equivalent to the "environmental means" of claim 1 on appeal as disclosed in the present application, to be an argument under the sixth paragraph of 35 U.S.C. ' 112 as in In re Donaldson, 16 F.3d 1189, 1193, 29 USPQ2d 1845, 1848-49 (Fed. Cir. 1994).

Accordingly, since the claim is in "means plus function" format, we construe the "environmental means responsive to detection of a high velocity of the delivery envelope during water travel for maintenance of a safe condition…" to include only those means actually disclosed in the instant application and their equivalents under 35 U.S.C. ' 112, sixth paragraph. Thus, even though not specifically mentioned in the claim language, we construe this means, in accordance with 35 U.S.C. ' 112, sixth paragraph, to include the specific water impact system 40 and hydrodynamic piston 80 described at pages 3 through 9 of the instant specification and equivalents thereof so that the "generation of hydrodynamic pressure during travel of device

10 through water at a predetermined high velocity" [specification-page 7] is detected, thus excluding parachute drops and such, as disclosed by Reams, wherein the deployment envelope sinks, relatively slowly, and vertically, in the water.

The examiner's decision rejecting claim 1 under 35 U.S.C. ' 102(b) is reversed.

REVERSED

James D. Thomas Administrative Patent Judge	)	
Kenneth W. Hairston Administrative Patent Judge	)	BOARD OF PATENT APPEALS AND INTERFERENCES
Errol A. Krass Administrative Patent Judge	)	

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