



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/946,559	11/28/2007	James S. Mason	RAY0043US2	9392
18227	7590	02/27/2013	EXAMINER	
Cantor Colburn I.I.P - Raytheon			TILLMAN, JR, REGINALD S	
20 Church Street			ART UNIT	
22nd Floor			PAPER NUMBER	
Hartford, CT 06103			3641	
			NOTIFICATION DATE	
			DELIVERY MODE	
			02/27/2013	
			ELECTRONIC	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

USPTOPatentMail@cantorcolburn.com

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte JAMES S. MASON and JAMES S. WILSON

Appeal 2011-000418
Application 11/946,559
Technology Center 3600

Before EDWARD A. BROWN, REMY J. VANOPHEM, and
MITCHELL G. WEATHERLY, *Administrative Patent Judges*.

WEATHERLY, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

James A. Mason and James S. Wilson (“Appellants”) appeal under
35 U.S.C. § 134 from the decision of the Examiner rejecting claims 1-22.

We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

The claims are directed to a hermetic covering system and method for a projectile. Claim 1, reproduced below, is illustrative of the claimed subject matter:

1. A hermetic covering system, comprising:
a projectile having a body and a component housing moisture-sensitive equipment; and
at least one bag having an opening and enclosing an inner cavity, the at least one bag hermetically sealed to the body such that the projectile protrudes through the opening and the component is disposed in the inner cavity to protect the component during storage of the projectile.

REFERENCES

The Examiner relies upon the following evidence:

Panlaqui	US H213	Feb. 3, 1987
Shores	US 4,753,169	Jun. 28, 1988
Jongchul	US D597,309	Aug. 4, 2009
Short Brothers	GB 843,037	Aug. 4, 1960

REJECTIONS

Appellants seek our review of the following rejections:

1. Claims 1, 3, 4, 6-8, 12, 14, 15, and 17-19 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Shores. Ans. 4-5.
2. Claims 2 and 13 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Shores and Panlaqui. Ans. 5-6.
3. Claims 5 and 16 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Shores and Jongchul. Ans. 6.
4. Claims 9-11 and 20-22 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Shores and Short Brothers. Ans. 6-7.

OPINION

Obviousness of claims 1, 3, 4, 6-8, 12, 14, 15, and 17-19 over Shores

The Examiner finds that Shores describes all limitations of independent claims 1 and 12 with the exception of the claimed bag being “hermetically sealed” to the body. Ans. 5. However, the Examiner finds that Shores describes a sheath 40 that covers nose portion 30 and acts as a mechanical shield which protects against contamination. *Id.* The Examiner then concludes that a skilled artisan would have found it obvious to modify Shores’s sheath to hermetically seal it to the nose portion. *Id.* The Examiner bolsters this conclusion by noting that Shores discloses that: (1) sheath 40 is circumferentially and continuously bonded to missile casing 14 with conductive bonding material (*id.* at 8 (citing Shores, col. 3, ll. 1-10)) and (2) sheath 40 is made from “metalized material” (Ans. 5 (citing Shores, col. 2, ll. 64-68)).

Appellants argue that Shores teaches away from hermetically sealing the sheath to the missile casing because Shores’s sheath includes “weakened” seams 42. App. Br. 10-11. Appellants contend that modifying Shores’s sheath to hermetically seal it to the missile body would require eliminating the weakened seams. *Id.* at 11. Appellants argue that removing these seams would render Shores’s sheath inoperable for its intended purpose, which precludes a finding of obviousness. *Id.* (citing MPEP § 2143.01).

The Examiner responds noting that hermetically sealing Shores’s sheath to the missile casing would not require removing the seams. Ans. 8. The Examiner determines that even though the seams are weakened compared to the surrounding material, there is no indication that the seams

are so weak that they would leak air. *Id.* To the contrary, the Examiner finds that Shores's seams are strong enough to withstand launch forces and that the seams would remain intact during storage, which is all that is required of claims 1 and 12. *Id.* We agree. We note, for example, that Shores's seams 42 remain intact until they are torn apart *after* missile launch and then only after an explosive charge on the leading tip of the missile detonates to start the tearing. Shores, col. 4, ll. 6-22. The Examiner correctly notes that the claimed hermetic seal is recited "to protect the component during storage of the projectile." Ans. 5.

Moreover, the Specification indicates that Appellants' hermetically sealed bag 20 is made of relatively weak materials, e.g., aluminum or copper foil, "that may be quickly torn from projectile 12 when needed." Spec., p. 8, ll. 14-25. Additionally, one exemplary method of hermetically sealing the bag 20 to the missile casing 14 is via an adhesive. Shores describes precisely the same arrangement, namely, sheath 40 made of "metalized material" that is bonded around the entire circumference of the nose portion 30 of missile casing 14 using conductive bonding material. Shores, col. 2, l. 64 to col. 3, l. 11.

In Appellants' Reply Brief, they argue without evidentiary support that the weakened seams "may ... cause an airtight seal to be impossible." Reply Br. 3. However, Appellants acknowledge that Shores's sheath 40, even with its weakened seams 42, has enough integrity to protect the contents of the nose portion from contamination prior to launch. Reply Br. 3, App. Br. 12. After reviewing Shores, we find no indication that seams 42 preclude hermetically sealing its sheath 40 to the missile casing 14. Furthermore, Shores instructs that sheath 40 protects the contents inside it

from contamination. Shores, col. 3, ll. 12-19. Therefore, we reject Appellants' arguments that Shores teaches away from the Examiner's proposed slight, if any, modification of Shores's sheath to ensure a hermetic seal on the nose portion. For these reasons we affirm the Examiner's rejection of independent claims 1 and 12 under § 103(a) as being unpatentable over Shores. Because Appellants proffer no separate arguments for reversing the rejection of dependent claims 3, 4, 6-8, 14, 15, and 17-19 over Shores, we also affirm the rejection of these claims.

Obviousness of claims 2 and 13 over Shores and Panlaqui

Appellants argue for reversing the rejection of dependent claims 2 and 13 solely on the same grounds proffered for reversing the rejection of claims 1 and 12 respectively. App. Br. 13. For the same reasons that we affirm the rejection of claims 1 and 12, we also affirm the rejection of claims 2 and 13.

Obviousness of claims 5 and 16 over Shores and Jongchul

Appellants argue for reversing the rejection of dependent claims 5 and 16 solely on the same grounds proffered for reversing the rejection of claims 1 and 12 respectively. App. Br. 13. For the same reasons that we affirm the rejection of claims 1 and 12, we also affirm the rejection of claims 5 and 16.

Obviousness of claims 9-11 and 20-22 over Shores and Jongchul

1. Claims 9 and 20

Appellants argue for reversing the rejection of dependent claims 9 and 20 solely on the same grounds proffered for reversing the rejection of claims 1 and 12 respectively. App. Br. 13. For the same reasons that we affirm the rejection of claims 1 and 12, we also affirm the rejection of claims 9 and 20.

2. Claims 10, 11, 21, and 22

Appellants argue separately for reversing the rejection of dependent claims 10, 11, 21, and 22. App. Br. 13-14. The Examiner finds that Short Brothers describes pad 12, which physically holds the sheath (i.e., Short Brothers's flexible envelope 15) in a fixed position. Ans. 9. Appellants contend that Short Brothers's pad does not "attach a bag to the container" but rather "space[s] the missile within the casing." App. Br. 13 (citing Short Brothers, p. 1, ll. 61-63). Appellants recast the same argument by contending that Short Brothers's pad 12 is not "configured to maintain the at least one bag in a generally fixed position relative to the component" as recited in claim 10. Reply Br. 5. We disagree. The claim language merely requires that the housing maintain the bag "in a generally fixed position relative to the component." Short Brothers's pad 12 meets this limitation by simultaneously contacting both the housing (casing 10) and the bag (flexible envelope 15) surrounding the component.

Appellants also contend that the pad 12 of Short Brothers is not the "housing" and is not "disposed over the at least one bag" as recited in claim 10. However, the Examiner finds that it is Short Brothers's container (i.e., casing 10), which is disposed over the bag (i.e., flexible envelope 15), that prevents the bag from moving. Ans. 9. The Examiner also finds that Short Brothers's pad 12, which is attached on the inside surface of the container, further secures the bag (i.e., flexible envelope 15) in position. *Id.* We agree. Claim 10 broadly requires maintaining the bag "in a generally fixed position relative to the component." The elements that the Examiner identifies in Short Brothers meet this requirement. Appellants proffer no separate

Appeal 2011-000418
Application 11/946,559

argument for reversing the rejection of claims 11 and 22. Therefore, we affirm the rejection of claims 10, 11, 21, and 22.

DECISION

For the reasons stated above, we affirm the rejections of claims 1-22. No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED

mls