

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

---

*Ex parte* SHADDY Y. HANNA and MAMDOUH M. SALAMA

---

Appeal 2007-2795  
Application 10/131,658  
Technology Center 3700

---

Decided: January 17, 2008

---

Before DONALD E. ADAMS, TONI R. SCHEINER, and DEMETRA J. MILLS, *Administrative Patent Judges*.

ADAMS, *Administrative Patent Judge*.

DECISION ON APPEAL

This appeal under 35 U.S.C. § 134 involves claims 1, 2, 27-30, 42, 81-83, and 85. The only remaining claims (claims 3-26, 31-41, and 84) were withdrawn from consideration as drawn to non-elected subject matter (Br. 3 and 17). We have jurisdiction under 35 U.S.C. § 6(b).

## INTRODUCTION

The claims are directed to a nontwisted composite offshore platform tether. Claims 1, 42, 81, 83, and 85 are illustrative:

1. A nontwisted composite offshore platform tether.
42. A nontwisted composite offshore platform tether produced by the method comprising:
  - a) supplying one or more composite rods;
  - b) arranging the rods axially; and
  - c) encasing the rods within a jacket such that the resulting offshore platform tether is nontwisted.
81. [A nontwisted composite offshore platform tether further comprising one or more composite rods encased in a jacket, wherein a portion of the rods is bundled into one or more strands,] wherein at least a portion of said rods comprise discontinuous carbon fibers in a polymer matrix.
83. [A nontwisted composite offshore platform tether further comprising one or more composite rods encased in a jacket, wherein a portion of the rods is bundled into one or more strands,] wherein at least a portion of said rods comprise carbon fibers spun into long continuous lengths in a thermoset resin matrix.
85. A nontwisted composite offshore platform tether configured to connect between a floating structure and the ocean floor.

The Examiner relies on the following prior art references to show unpatentability:

L'Espérance	US 4,620,401	Nov. 4, 1986
McIntosh	US 5,601,892	Feb. 11, 1997

The rejections as presented by the Examiner are as follows:

1. Claim 85 stands rejected under 35 U.S.C. § 112, second paragraph, as indefinite in the recitation of “configured”.
2. Claims 1, 2, 27-30, 42, 83, and 85 rejected under 35 U.S.C. § 102(b) as being anticipated by L’Espérance.
3. Claims 1, 2, 27-30, 42, 81, 82 and 85 rejected under 35 U.S.C. § 102(b) as being anticipated by McIntosh.
4. Claims 81 and 82 stand rejected under 35 U.S.C. § 103(a) as unpatentable over L’Espérance.
5. Claim 83 stands rejected under 35 U.S.C. § 103) as unpatentable over McIntosh.

We reverse rejection 1. We affirm all other grounds of rejection.

## DISCUSSION

1. Claim 85 stands rejected under 35 U.S.C. § 112, second paragraph, as indefinite in the recitation of “configured”. Claim 85 is reproduced above.

The Examiner finds it unclear whether the term “configured” “means to be tethered, or . . . capable of having the necessary means somehow connected” (Answer 3). If the latter, the Examiner questions how the cable is “connected” (*id.*). According to the Examiner, claim 85 recites no specific width, length or strength requirements for the tether or the platform (Answer 5). The Examiner finds that the only specific structure provided in claim 85 is that the tether is nontwisted (*id.*). In sum, the Examiner finds that “all Applicant[s] ha[ve] claimed is a length of unaltered material with an intended use” (*id.*).

We agree with the Examiner’s interpretation of claim 85 to read on a length of unaltered nontwisted composite material that is intended to be used to tether a floating structure to the ocean floor. We disagree, however, that the term “configured” renders the claim indefinite. To the contrary, we agree with Appellants’ assertion that “one of ordinary skill in the art would readily understand that claim 85 is directed to a nontwisted composite offshore platform tether that can be connected between a floating structure and the ocean floor using various designs or configurations known in the art” (Br. 7). The Examiner recognizes one such configuration – tethering a kayak to a lake floorbed (or shallow portion of the ocean floor) with a fishing rod – “by sinking the fishing rod into the lake floorbed, and resting it against the kayak with no wind” (Answer 6). We agree that this is one configuration known in the art to connect a floating structure, e.g., a kayak, to a shallow portion of the ocean floor.

No doubt the claims are broad; however, “breadth is not to be equated with indefiniteness.” *In re Miller*, 441 F.2d 689, 693 (CCPA 1971). Accordingly, we reverse the rejection of claim 85 under 35 U.S.C. § 112, second paragraph.

2. Claims 1, 2, 27-30, 42, 83, and 85 rejected under 35 U.S.C. § 102(b) as being anticipated by L’Espérance. Appellants separately argue claims 1, 42, and 85. Accordingly, we limit our discussion to claims 1, 42, and 85. Claims 2, 27-30, and 83 will stand or fall together with claim 1. 37 C.F.R. § 41.37(c)(1)(vii).

Claims 1, 42, and 85 are drawn to a nontwisted composite offshore platform tether. A “tether” refers to “a cord that anchors something . . . to something else” (Wikipedia<sup>1</sup>). According to Appellants’ Specification “[c]omposite tethers” are “also referred to as cables, tendons, support lines, mooring lines and the like” (Specification ¶ 0002). In other words, a material that is capable of anchoring or connecting something to something else.

The Examiner finds the term “offshore platform” to represent the intended use of the nontwisted composite tether (Answer 3). In response, Appellants assert that the term “[o]ffshore platform’ modifies and describes the word ‘tether’ . . . just like the words ‘nontwisted’ and ‘composite’” (Br. 12). We disagree. The terms “nontwisted” and “composite” define the structure of the claimed tether. This nontwisted composite tether can be used to anchor a dog to a pole, a kayak to a lake bed, or an oil rig to the ocean floor. Each is simply the intended use of the claimed tether. The term “offshore platform” places no structural limitation on the claimed tether. As the Examiner explains,

while Applicant may intend a drilling rig with dimensions in thousands of feet, his ‘offshore platform’ as claimed reads upon a floating surfboard, or a raft, or anything that could be used as a platform. Even a plastic plate could be considered an offshore platform, for something small to be supported, like a cup.

(Answer 6). We agree. The term “offshore platform” is an intended use limitation, which places no structural limitation on the claimed tether. The Examiner finds that L’Espérance “teaches a nontwisted composite tether . . . comprising one or more continuous length carbon/thermoset resin rods . .

---

<sup>1</sup> <http://en.wikipedia.org/wiki/Tether>.

. encased in a jacket . . . wherein the . . . rods are bundled into one or more strands . . . all of which contain zero twist” (*id.*).

*Claim 1:*

Claim 1 is drawn to a nontwisted composite tether. We agree with the Examiner’s interpretation of the term “offshore platform” to represent an intended use limitation of the claimed tether. Further, as discussed above, we interpret the term “tether” to read on a material that is capable of anchoring or connecting something to something else.

Appellants assert that “*L’Espérance* relates to composite structural rods for reinforcing a mass of concrete material (*i.e.* a replacement for standard rebar)” (Br. 11). In this regard, Appellants assert that *L’Espérance* is “not even related to the relevant field of tethers, let alone offshore platform tethers” (*id.*). We are not persuaded by Appellants’ emphasis on the intended use of the claimed tether, e.g., an offshore platform tether. As discussed above, a tether is nothing more than a material that is capable of anchoring or connecting something to something else. *L’Espérance* teaches a “structural rod for reinforcing a mass of concrete material . . . which forms a mechanical anchorage with the mass of concrete material in which it is embedded” (*L’Espérance*, col. 1, ll. 60-66).

Appellants’ claim 1 fails to distinguish the claimed tether from *L’Espérance*’s non-twisted composite structural rods which are used as a mechanical anchorage for a mass of concrete material in which they are embedded. “Every element of the claimed invention must be literally present, arranged as in the claim.” *Richardson v. Suzuki Motor Co., Ltd.*, 868 F.2d 1226, 1236 (Fed. Cir. 1989). The structural features of the claimed

“tether”, nontwisted and composite, are fully met by L’Espérance rods. While Appellants refer to this article of manufacture as a “tether”, L’Espérance refers to it a structural rod. There is no evidence on this record to demonstrate that L’Espérance’s rods could not be used as a tether for an offshore platform, e.g., to tether a kayak to a shallow portion of the ocean floor. Accordingly, we affirm the rejection of claim 1 under 35 U.S.C. § 102(b) as being anticipated by L’Espérance. Claims 2, 27-30, and 83 fall together with claim 1.

*Claim 42:*

Claim 42 is drawn to a nontwisted composite offshore platform tether produced by the method comprising:

- a) supplying one or more composite rods;
- b) arranging the rods axially; and
- c) encasing the rods within a jacket such that the resulting offshore platform tether is nontwisted.

The Examiner finds that L’Espérance’s nontwisted composite tether comprises “one or more continuous length carbon/thermoset resin rods . . . encased in a jacket” (Answer 3).

Appellants focus attention on the term “offshore platform” asserting that “the Specification and prosecution history, most definitely supports the conclusion that the inventors invented an offshore platform tether and not another type of tether, such as an animal tether or a sports ball tether. . .” (Br. 13-14). While this may be true, Appellants’ claim fails to structurally distinguish the claim tether from any other nontwisted composite material that is capable of performing the same function.

We recognize Appellants assertion that “the term offshore platform results in a structural difference between the claimed invention and the prior art” (Br. 14). Specifically, Appellants assert that

an offshore platform tether must be capable of connecting an offshore platform to the ocean floor, and must also have the following characteristics: (a) adequate strength to withstand constant fatigue forces imposed by the ocean; (b) corrosion resistance to reduce the likelihood of failure due to exposure to salt water; (c) a sufficient length, such as several hundred to several thousand feet, for example, to anchor the offshore platform to the ocean floor; and (d) a sufficient cross-sectional area to handle a given load and provide the needed stiffness.

(*Id.*) We disagree. As Appellants recognize these characteristics depend upon numerous

design criteria, such as the buoyancy of the platform, the wave force imposed on the tether during standard conditions, the strength of storm (hurricane) the tether would be designed to withstand, and the like. The corrosion resistance level of the tether would depend upon such design criteria as the life expectancy of the oil field, for example. The length of the tether would depend upon the depth of the ocean floor at the desired anchoring location.

(Br. 15.) Nothing in Appellants’ Specification or claim requires such a limited view of the claimed tether or the term “offshore platform”. As discussed above

while Applicant may intend a drilling rig with dimensions in thousands of feet, his “offshore platform” as claimed reads upon a floating surfboard, or a raft, or anything that could be used as a platform. Even a plastic plate could be considered an offshore platform, for something small to be supported, like a cup.

(Answer 6.)

Accordingly, we disagree with Appellants' assertion that L'Espérance's rods do not meet the requirements of claim 42. Simply stated, the claim limitations fail to distinguish the claimed tether from L'Espérance rods. For the reasons set forth above, we also disagree with Appellants assertion that L'Espérance is "outside of the field of Appellants' endeavor, the petroleum energy industry, and more specifically design of anchoring or mooring systems, namely, offshore platform tethers" (Br. 17).

"Every element of the claimed invention must be literally present, arranged as in the claim." Richardson v. Suzuki Motor Co., Ltd., 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). The structural features of the claimed "tether", nontwisted and composite, are fully met by L'Espérance rods. While Appellants refer to this article of manufacture as a "tether", L'Espérance refers to it a structural rod.

Accordingly, we affirm the rejection of claim 42 under 35 U.S.C. § 102(b) as being anticipated by L'Espérance.

*Claim 85:*

Claim 85 is drawn to a nontwisted composite offshore platform tether configured to connect between a floating structure and the ocean floor. The Examiner finds the term "offshore platform" is an intended use limitation of the claimed nontwisted composite tether (Answer 3). We find no error in the Examiner's *prima facie* case of anticipation.

Appellants have included their arguments regarding claim 85 with those discussed above regarding claims 1 and 42. For the reasons set forth above, we are not persuaded by these arguments. Accordingly, we affirm

the rejection of claim 85 under 35 U.S.C. § 102(b) as being anticipated by L'Espérance.

3. Claims 1, 2, 27-30, 42, 81, 82 and 85 rejected under 35 U.S.C. § 102(b) as being anticipated by McIntosh. Appellants separately argue claims 1, 42, and 85. Accordingly, we limit our discussion to claims 1, 42, and 85.

Claims 2, 27-30, 81, and 82 will stand or fall together with claim 1. 37 C.F.R. § 41.37(c)(1)(vii). The representative claims are discussed above.

The Examiner finds that “McIntosh teaches a nontwisted composite tether . . . comprising one or more discontinuous carbon/thermoset resin rods . . . encased in a jacket . . . , wherein the one or more rods are bundled into one or more strands . . . all of which contain no twist” (Answer 4). In addition, the Examiner finds the term “offshore platform” to be a statement of the intended use of the claimed nontwisted composite tether (*id.*).

McIntosh teaches hollow rods that “can be made into fishing rods, golf shafts, arrow shafts, and any other product that requires a flexible, resilient body exhibiting a generally circular exterior cross section” (McIntosh, col. 4, ll. 54-57).

*Claim 1:*

Appellants make the same arguments for this rejection as they did for the rejection of claim 1 over L'Espérance. For the same reasons set forth above, we find that Appellants fail to distinguish the claimed tether from McIntosh's non-twisted composite hollow rods which can be used for any purpose that requires a flexible, resilient body exhibiting a generally circular exterior cross section (McIntosh, col. 4, ll. 54-57). Accordingly, we affirm

the rejection of claim 1 under 35 U.S.C. § 102(b) as being anticipated by McIntosh. Claims 2, 27-30, 81, and 82 fall together with claim 1.

*Claim 42:*

Appellants make the same arguments for this rejection as they did for the rejection of claim 42 over L’Espérance. For the same reasons set forth above, we find that the claim limitations fail to distinguish the claimed tether from McIntosh’s rods. Accordingly, we affirm the rejection of claim 42 under 35 U.S.C. § 102(b) as being anticipated by McIntosh.

*Claim 85:*

Appellants make the same arguments for this rejection as they did for the rejection of claim 85 over L’Espérance. For the same reasons set forth above, we find that the claim limitations fail to distinguish the claimed tether from McIntosh’s rods. Accordingly, we affirm the rejection of claim 85 under 35 U.S.C. § 102(b) as being anticipated by McIntosh.

4. Claims 81 and 82 stand rejected under 35 U.S.C § 103(a) as unpatentable over L’Espérance. Appellants did not separately argue the claims; therefore they stand or fall together. 37 C.F.R. § 41.37(c)(1)(vii). Claim 81 is drawn to a nontwisted composite tether further comprising one or more composite rods encased in a jacket, wherein a portion of the rods is bundled into one or more strands, wherein at least a portion of said rods comprise discontinuous carbon fibers in a polymer matrix. The term “offshore platform” is interpreted to be a statement of the intended use of the claimed nontwisted composite tether (*id.*).

The Examiner finds that L'Espérance

teaches the invention as discussed above, but fails to specifically teach discontinuous carbon fiber usage. It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to utilize discontinuous carbon fibers in the untwisted composite tether of L'Espérance, so as to provide a strengthening component to the composite in a more economical manner. By utilizing carbon fibers, the ordinarily skilled artisan would understand the same strength characteristics are provided, but at a reduced price, since discontinuous carbon fibers are cheaper.

(Answer 4.) We find no error in the Examiner's *prima facie* case of obviousness.

Appellants assert that

because *L'Espérance* and *McIntosh* each fail to teach or suggest an offshore platform tether, or a structure capable of performing as an offshore platform tether, the cited patents fail to establish a *prima facie* case of anticipation or obviousness with respect to independent claims 1, 42 and 85, as well as dependent claims 2, 27-30 and 81-83.

(Br. 17). For the reasons set forth above, we are not persuaded by Appellants' focus on the intended use of the claimed tether as an offshore platform tether. In the absence of any other specific rebuttal of the rejection of claim 81, we affirm the rejection of claim 81 under 35 U.S.C. § 103(a) as unpatentable over *L'Espérance*. Claim 82 falls together with claim 81.

5. Claim 83 stands rejected under 35 U.S.C. § 103(a) as unpatentable over *McIntosh*. Claim 83 is drawn to a nontwisted composite tether further comprising one or more composite rods encased in a jacket, wherein a portion of the rods is bundled into one or more strands, wherein at least a

portion of said rods comprise carbon fibers spun into long continuous lengths in a thermoset resin matrix. The term “offshore platform” is interpreted to be a statement of the intended use of the claimed nontwisted composite tether (*id.*).

Appellants assert that

because *L'Espérance* and *McIntosh* each fail to teach or suggest an offshore platform tether, or a structure capable of performing as an offshore platform tether, the cited patents fail to establish a *prima facie* case of anticipation or obviousness with respect to independent claims 1, 42 and 85, as well as dependent claims 2, 27-30 and 81-83.

(Br. 17). For the reasons set forth above, we are not persuaded by Appellants’ focus on the intended use of the claimed tether as an offshore platform tether. In the absence of any other specific rebuttal of the rejection of claim 81, we affirm the rejection of claim 83 under 35 U.S.C § 103(a) as unpatentable over *McIntosh*.

## CONCLUSION

In summary, we reverse rejection 1 and affirm all other grounds of rejection.

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

dm

Appeal 2007-2795  
Application 10/131,658

Patrica Meier Conoco Philips Company  
P.O. Box 2443 IP Legal  
Bartsville, OK 74005