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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte ALLEN GARRETT SMITH, FRANK EDWARD HODGE,
DAVID JAMES PRASKO,
and TIMOTHY JOSEPH WEDDING

Appeal 2019–001897
Application 15/662,474
Technology Center 3600

Before: JOSEPH A. FISCHETTI, MICHAEL C. ASTORINO, and
KENNETH G. SCHOPFER, *Administrative Patent Judges*.

SCHOPFER, *Administrative Patent Judge*.

DECISION ON APPEAL

Pursuant to 35 U.S.C. § 134(a), Appellant appeals from the Examiner’s decision to reject claims 1–12 and 14–20.¹ We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM IN PART.

¹ We use the word “Appellant” to refer to “applicant” as defined in 37 C.F.R. § 1.42. Appellant identifies the real party in interest as Cambria County Association for the Blind and Handicapped. Appeal Br. 1.

BACKGROUND

The Specification discloses that the “invention has to do with a locking cable hanger system for use in the solar, mining, and electrical industries.” Spec. 1, ll. 8–9.

CLAIMS

Claims 1, 7, and 12 are the independent claims on appeal. Claim 1 is illustrative of the appealed claims and recites:

1. A cable hanger which comprises:
 - a high tensile strength wire with two opposing ends and cable carrying formations located intermediate of said ends;
 - one of said wire ends having a spiral gripper formation for engaging a messenger wire; and
 - the opposite of said one wire ends formed with a locking hook for engagement with the same messenger wire.

Appeal Br. 19.

REJECTION

1. The Examiner rejects claims 1–12 and 14–20 under 35 U.S.C. § 102(a)(1) as anticipated by Blackburn.²

DISCUSSION

A. Claims 1 and 6

With respect to claim 1, the Examiner finds that Blackburn discloses a device as claimed, and more specifically, the Examiner finds that Blackburn discloses a device with a locking hook end 6, a spiral gripper end 19, 20, and

² Blackburn, US 1,609,052, iss. Nov. 30, 1926.

cable carrying formations 10, 12, 13, 14, and 15 located intermediate these ends. Final Act. 2.

As discussed below, we are not persuaded of reversible error in these findings by Appellant's arguments.

Appellant argues that the Examiner has interpreted the claims in an overly broad manner with respect to the Examiner's finding that Blackburn discloses a spiral gripper and a locking hook as claimed. Appeal Br. 6. Appellant asserts that the elements relied upon for this claim limitations are substantially the same in Blackburn, and thus, the Examiner is essentially interpreting the claim so "that a gripper and a hook are . . . the same construct." *Id.* Appellant asserts that the spiral gripper and locking hook described in the Specification are structurally different, and thus, Appellant indicates that the Specification does not support the Examiner's claim interpretation. *Id.* at 9. Further, Appellant argues that the term "spiral" should be interpreted to require at least one turn about an axis, and Appellant asserts that the alleged spiral gripper identified in Blackburn is u-shaped and does "not curl about the messenger wire." *Id.* at 10.

Even if we were to agree with Appellant regarding the appropriate interpretation of the term spiral, Appellant has not identified any error in the Examiner's findings. In particular, we disagree that Blackburn's elements 6 and 19/20 are substantially the same. Blackburn's Figures show that element 6 is a short partial loop and element 19/20 is a long curved portion combined with a short curved portion to provide a complete loop about the wire 11. *See* Blackburn Figs. 1–5. Here, we also note that Appellant asserts that Blackburn's element 19/20 does not make at least one turn about an axis. However, a close inspection of Blackburn's Figure 3 shows that

elements 19 and 20 overlap to form a complete loop about wire 11 and element 6 does not, as indicated by the dotted lines in the Figure. Thus, under Appellant's interpretation that the term spiral is a curve that makes at least one turn about an axis, we find that elements 19/20 constitute a spiral and element 6 does not. Therefore, Appellant's argument fails to persuade us that reading Blackburn's elements 19 and 20 together cannot be considered a spiral gripper as claimed.

We also note that Appellant's argument focuses only on element 20 of Blackburn. However, as noted above, the Examiner reads elements 19 and 20 together as the claimed spiral gripper. Appellant argues in the Reply Brief that element 19 is not a part of hook 20 in Blackburn. Reply Br. 2. However, Blackburn discloses that elements 19 and 20 work together to grip the messenger wire. *See* Blackburn 1, ll. 96–106. Thus, we find no error in the Examiner's finding that elements 19 and 20 together may be considered a spiral gripper.

Based on the foregoing, we are not persuaded of error in the rejection of claim 1. Because Appellant does not raise separate arguments addressing the requirements of dependent claim 6, we are also not persuaded of error in the rejection of claim 6. Accordingly, we sustain the rejection of claims 1 and 6.

B. Claims 4, 5, and 7–11

Claim 7 is similar to claim 1 except that it additionally requires “a data carrier wire formation formed on the distal end of said locking hook.” Appeal Br. 20. Similarly, claim 4 depends from claim 1 and further requires “said locking hook includes a data carrier wire formation.” *Id.* at 19. The Examiner finds that Blackburn discloses a locking hook that includes a data

carrier wire formation because Blackburn's hook 6 is capable of holding a data carrier wire. Final Act. 4. However, when the claim is appropriately interpreted in light of the Specification, one of ordinary skill in the art would understand that the claimed locking hook must be capable of performing the function of engaging the messenger wire and holding a data carrier wire at the same time. *Infra*. We agree with Appellant that the Examiner has not shown that Blackburn's device necessarily includes this capability. *See* Appeal Br. 15–17.

Regarding the appropriate interpretation of the claim, we agree with the Examiner that the limitations at issue include functional language. The claims require a locking hook “for engagement with the same messenger wire” and that the locking hook “includes a data carrier wire formation.” However, one of ordinary skill in the art would understand that these functions must be performed by the claimed device at the same time. Specifically, each embodiment including a hook and data carrier wire formation includes separate structures such that the messenger wire is engaged at the same time that a data carrier wire is separately held by the device. *See, e.g.*, Spec. Figs. 2, 14, 15. Further, the Specification discloses that the design is such that the data carrier wire formation is placed to keep separation between the data carrier wire and the cables held by the cable carrying formations while also providing a firm attachment to the messenger wire. *Id.* at 10, ll. 4–7.

Thus, we determine that the broadest reasonable interpretation of the claim requires a locking hook that can perform the functions of engaging the messenger wire and holding a data carrier wire at the same time. Because the Examiner has not identified any structure in Blackburn that is necessarily

capable of performing these functions at the same time, we find reversible error in the rejection of claims 7 and 4. Accordingly, we do not sustain the rejection of these claims. We also do not sustain the rejections of dependent claims 5 and 8–11, which depend from either claim 4 or 7.

C. Claims 2, 3, and 12–20

Claim 12 is similar to claim 1, but further requires “said cable carrying formations includes a plurality of cable carrying formations separated by cable carrier dividers.” Appeal Br. 21. Similarly, claim 2 depends from claim 1 and further recites “wherein adjacent cable carrying formations are separated by cable carrier dividers.” *Id.* at 19. The Examiner finds that Blackburn discloses a plurality of cable carrying formations 10, 12, 13, 14, and 15; and the Examiner further finds that elements 10, 13 and 15 can instead be described as cable carrier dividers because they separate elements 9 and 12, 12 and 14, and 14 and 16, respectively. Final Act. 4. The Examiner relies on similar findings with respect to claim 2. *Id.* at 3.

We are persuaded by Appellant’s argument that the Examiner has not shown that Blackburn discloses cable carrying formations separated by cable carrier dividers. *See* Appeal Br. 13–15. When the claim is interpreted in light of the Specification, we agree with Appellant that the claimed plurality of cable carrying formations that are separated by a divider each must be capable of holding a cable or bundle of cables separate from other cables. The Specification discloses only a device that includes cable carrying formations 16 and 17 that are separated by a cable divider 18, and the Specification further discloses that “[w]hat is important is that the hanger 10 provides sufficient separation between both cable carrying formations 16, 17.” Spec. 10, ll. 4–5. Notably, every embodiment depicted in the

Specification provides dividers between formations capable of carrying separate cables or bundles of cables. *See, e.g., id.* at Figs. 14, 15, 17, 23. Thus, given this disclosure, one of ordinary skill in the art would understand that the claimed “cable carrier dividers” provide the function of separating the “plurality of cable carrying formations” such that the device is capable of holding multiple cables separated from each other.

Given this understanding of the appropriate interpretation of the claim, we find that Blackburn does not disclose a plurality of cable carrying formations separated by cable carrier dividers as required by the claim. For example, the dividers identified by the Examiner merely separate portions of the hanger that hold the same cable or may hold multiple cables together. Accordingly, we do not sustain the rejection of claim 12 or claim 2. We also do not sustain the rejection of claims 3 and 13–20, which each depend from claim 2 or 12.

CONCLUSION

We AFFIRM the rejection of claims 1 and 6. We REVERSE the rejection of claims 2–5 and 7–20.

DECISION SUMMARY

In summary:

Claims Rejected	35 U.S.C. §	Basis	Affirmed	Reversed
1–12, 14–20	102(a)(1)	Blackburn	1, 6	2–5, 7–20

Appeal 2019-001897
Application 15/662,474

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

AFFIRMED IN PART