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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/309,984	12/02/2011	Joshua Makower	P049 C1	3970
118733	7590	11/26/2019	EXAMINER	
Moximed, Inc 46602 Landing Parkway Fremont, CA 94539			PRONE, CHRISTOPHER D	
			ART UNIT	PAPER NUMBER
			3774	
			NOTIFICATION DATE	DELIVERY MODE
			11/26/2019	ELECTRONIC

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte JOSHUA MAKOWER,
CLINTON N. STONE, ALAN C. REGALA,
MICHAEL E. LANDRY, ANTON G. CLIFFORD, and
WILLIAM G. TAMMEN

Appeal 2018-008884¹
Application 13/309,984
Technology Center 3700

Before MICHAEL L. HOELTER, ANNETTE R. REIMERS, and
LISA M. GUIJT, *Administrative Patent Judges*.

GUIJT, *Administrative Patent Judge*.

¹ Appellant identifies the following U.S. Patent Applications as related to the present Appeal: (i) 11/743,097 (Appeal No. 2018-008882; decision rendered Aug. 20, 2019); (ii) 13/800,676 (Appeal No. 2018-004053; decision rendered Jan. 9, 2019); and (iii) 14/075,090 (issued as U.S. Patent 10,010,421 B2). Appeal Br. 3. Notably, the following appeal is also related to the instant application: Appeal No. 2018-005378 (decision rendered Sept. 3, 2019); Application No. 11/743,605.

DECISION ON APPEAL

Appellant² appeals under 35 U.S.C. § 134(a) from the Examiner's rejection of claims 26–32. Non-Final Act. 1. We have jurisdiction under 35 U.S.C. § 6(b).

We REVERSE.

STATEMENT OF THE CASE

Claim 26, reproduced below, as the sole independent claim on appeal with disputed limitations italicized for emphasis, is exemplary of the subject matter on appeal.³

26. A method of treating a knee joint with an implantable system, the knee joint including first and second members movable between an extension position and a flexion position through greater degrees of flexion of the knee joint, the method comprising:

- accessing the knee joint;
- attaching a first attachment to the knee joint first member;
- attaching a second attachment structure to the knee joint second member; and

² 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 Moximed Inc. Appeal Br. 3.

³ Notably, in response to the Examiner's Restriction Requirement dated February 14, 2013, Appellant elected “[c]laims 26-32, drawn to a method of treating a knee joint,” rather than “[c]laims 9-10 and 12-16, drawn to an implantable system” (Restriction Requirement, dated Feb. 2, 2013, page 2), characterized by Appellant as “Group II, Species A, collar subspecies A, adjusting apparatus subspecies A, link subspecies A, stop subspecies A and spacer subspecies A” (Response to Restriction Requirement, dated Apr. 3, 2013, page 1).

attaching an energy manipulation device to the first attachment structure and to the second attachment structure, *the energy manipulation device comprising a spring having one end not attached to the energy manipulation device*;

wherein the energy manipulation device is configured such that a lesser amount of energy manipulation occurs as the members defining the knee joint move from their extension position through greater degrees of flexion.

THE REJECTIONS

- I. Claims 26–32 stand rejected under 35 U.S.C. § 112, second paragraph, as indefinite.
- II. Claims 26–32 stand rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement.
- III. Claims 26–30 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Draper (US 2005/0261680 A1; published Nov. 24, 2005).
- IV. Claims 31 and 32 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Draper and Atkinson (US 2002/0095154 A1; published July 18, 2002).

ANALYSIS

Rejection I

The Examiner finds that the phrase “the energy manipulation device comprising a spring having one end not attached to the energy manipulation device” renders claim 26 indefinite. Non-Final Act. 4. The Examiner explains that “it is not clear how ‘a spring’, the only positively recited structural element of the claimed energy manipulation device, is not attached to itself.” *Id.*

Appellant argues that the Examiner “may have stumbled on the breadth of the claim, because it is silent concerning other parts of the spring” but that claim 26 “is clear on its face.” Appeal Br. 30 (citing *In re Packard*, 751 F.3d 1307 (Fed Cir. 2014)). Appellant submits that “[t]he unattached-spring-end feature permits Appellant’s method to perform functions . . . which are detailed in the [S]pecification.” Reply Br. 3.

A claim is properly rejected as being indefinite under 35 U.S.C. § 112, second paragraph if, after applying the broadest reasonable interpretation in light of the specification, the metes and bounds of a claim are not clear because the claim “contains words or phrases whose meaning is unclear.” *In re Packard*, 751 F.3d at 1310.

The Specification discloses that

FIG. 1A shows the knee joint at full extension with load being applied to springs 112 of the energy absorbing device, whereas FIG. 1B shows the knee joint flexed to 90° with zero load being applied to the springs by virtue of *the springs 112 being shorter than the length of the piston shafts 126*. The energy absorbing device *lengthens* as the knee swings from full extension to flexion and subsequently *shortens* as the knee swings from flexion to full extension such that the springs begin to be compressed between the ends of the device to absorb the load that the knee articulating surfaces normally would experience.

Spec. ¶ 112 (emphasis added).⁴ The Specification also discloses, with reference to Figures 1A to 1C, that

⁴ We reference the Substitute Specification filed February 14, 2012. Notably, Figures 12A–12H also show that the length of piston 288 can increase with no indication of any corresponding increase in the length of spring 112. *See* Spec. Figs. 12A–12H. This is possible if one of the ends of spring 112 is not fixed to piston 288.

one embodiment of an energy absorbing device 110 includes a piston base 114 and an arbor base 116. . . . A first or proximal end 122 of springs 112 is in *connection with* or in contact with the piston base, and a second or distal end of the springs are *in contact with* a spacer 124 when the knee joint is extended as shown in FIG. 1A.

Id. ¶ 113. Thus, the Specification discloses that one end of a spring 112 may be connected (or attached) to piston base 114, while the other end of spring 112 is only in contact with, but not attached, to a spacer.

Notably, claim 26 recites that the energy manipulation device “*compris[es]* a spring” rather than “consists of a spring,” and requires “one end” of the spring—rather than the entire spring—to be “not attached to the energy manipulation device.” *See* Appeal Br. 32 (Claims App.; emphasis added); *see also* Reply Br. 2–3 (explaining that claim 26 does not state that the spring itself is the *entire* energy manipulation device but, instead, is part of that device; nor does claim 26 state that the *entire* spring is not attached to the energy manipulation device). Moreover, to equate the “spring” as the “energy manipulation device” would render one of these terms superfluous. *See Bicon, Inc. v. Straumann Co.*, 441 F.3d. 945, 950 (Fed. Circ. 2006) (“[C]laims are interpreted with an eye toward giving effect to all terms in the claim.”). We further note that, as Appellant points out, the Examiner’s statement that “[w]hile the spring may not be ‘*fixed*’ to the piston base of the energy manipulation at one of its ends . . .” (Non-Final 4; emphasis added) is an acknowledgement that the claim language is clear. Appeal Br. 22.

Accordingly, we find that the phrase “the energy manipulation device comprising a spring having one end not attached to the energy manipulation device” is clear. In other words, one end of the spring is not attached to a structure that is part of the energy manipulation device; indeed, as evidenced

by the Specification *supra*, one end of the spring is not attached to any structure, including any structure of the energy manipulation device, for example, the piston, the piston base, or even the other end of the spring.

Accordingly, we do not sustain the rejection of claim 26 and claims 27–32 depending therefrom under 35 U.S.C. § 112, second paragraph, as indefinite.

Rejection II

The Examiner determines that the Specification fails to disclose the subject matter of independent claim 26, namely, “a spring having one end not attached to the energy manipulation device.” Non-Final Act. 3–4. The Examiner finds that “[w]hile [Appellant’s] spring may not be ‘fixed’ to the piston base of the energy manipulation device at one of its ends, it is clearly ‘attached’ to the energy manipulation device, as a whole, throughout its length in that the spring surrounds and rides along the piston.” *Id.* at 4. The Examiner also finds that “[Appellant’s] drawings represent cross-sectional embodiments of the invention and are not sufficient to support such a negative limitation.” *Id.*

In order to satisfy the written description requirement, “the specification must describe an invention understandable to [a] skilled artisan and show that the inventor actually invented the invention claimed.” *Ariad Pharms., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010) (en banc). “[T]he test for sufficiency is whether the disclosure of the application relied upon reasonably conveys to those skilled in the art that the inventor had possession of the claimed subject matter as of the filing date.” *Id.* (citation omitted). To have “possession,” “the specification must describe an invention understandable to that skilled artisan and show that the inventor

actually invented the invention claimed.” *Id.* Compliance with the written description requirement set forth in the first paragraph of 35 U.S.C. § 112 does not require that the claimed subject matter be described identically in the Specification, but the disclosure as originally filed must convey to those skilled in the art that applicant had invented the subject matter later claimed. *In re Kaslow*, 707 F.2d 1366, 1375 (Fed. Cir. 1983). The drawings in an application can be relied upon to show that an inventor was in possession of the claimed invention as of the filing date. *See Vas-Cath Inc. v. Mahurkar*, 935 F.2d 1555, 1565 (Fed. Cir. 1991) (“[D]rawings alone may be sufficient to provide the ‘written description of the invention’ required by § 112, first paragraph.”).

As discussed *supra* with respect to Rejection I, the Specification discloses an embodiment wherein a first or proximal end 122 of spring 112 is connected with piston base 114, while a second or distal end is only in contact with spacer 124 (i.e., not connected with a structure). We do not agree with the Examiner’s finding that because piston shaft 126 passes through spring 112, the second or distal end of spring 112 is *attached to*, or even in contact with, piston shaft 126. The Specification discloses that “piston shafts 126 . . . of the piston base slide within arbor shafts . . . of the arbor base.” Spec. ¶ 114 (emphasis added). In other words, the piston shafts are attached to the piston base, as is only a single end of the spring. Thus, it is concluded that Appellant’s Specification describes the energy manipulation device sufficiently to demonstrate that Appellant had possession of, and actually invented, the energy manipulation device as claimed.

Accordingly, we do not sustain the Examiner's rejection of claims 26–32 as failing to comply with the written description requirement.

Rejection III

Regarding independent claim 26, the Examiner finds, *inter alia*, that Draper's "link assemblies 40-80" correspond to the claimed energy manipulation device, and that, with respect to link assembly 60, one end of spring 67 is *not* attached to "the ends of central shaft 66 as the shaft is axially displaceable on lugs 65." Non-Final Act. 5 (citing Draper ¶ 54, Fig. 3D). Specifically, the Examiner finds that Draper discloses that both ends of spring 67 are "free floating and translatable," especially with respect to shaft 65, and that Draper does not disclose the ends "as being fixed or fused to the lugs." Ans. 7–8.

Appellant submits, *inter alia*, that "spring 67 is attached to the lugs 64, 65." Appeal Br. 24. Appellant argues that the Examiner "identifies no evidence in the record that supports the technical conclusion that the ends of Draper's springs are 'free floating and translatable', or that they 'are not disclosed as being fixed . . . and are completely free.'" Reply Br. 2.

To anticipate a claim, the disclosure of each element is not quite enough, as anticipation also requires the presence, in a single prior art reference, of all the elements "arranged as in the claim." *Finisar Corp. v. Direct Group, Inc.*, 523 F.3d 1323, 1334 (Fed. Cir. 2008).

Figure 3D of Draper is reproduced below

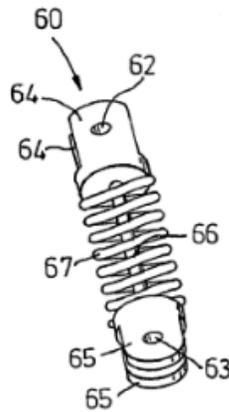


Fig. 3D

Figure 3D is a perspective view of a central module suitable for use in fixators. Draper ¶ 37.

Draper discloses, with reference to Figure 3D, that

a link assembly 60 provides for a variable distance of separation of pivots 14, 15 in hubs 62, 63. Link assembly 60 comprises a pair of lugs 64 and a pair of lugs 65, each pair being mounted on a central shaft 66 and being axially displaceable therealong. A compression spring 67 provides a means for biasing the distance of separation of the pivots 14, 15 towards a maximum limit of separation of the lugs pairs 64, 65 so as to counteract the natural compressive forces experienced by the joint.

Draper ¶ 54.

We determine that Draper's Figure 3D is *inconclusive* concerning whether either of the ends of compression spring 67 is attached or *not* attached to lugs 64, 65. See *Hockerson-Halberstadt, Inc. v. Avia Group Int'l, Inc.*, 222 F.3d 951, 956 (Fed. Cir. 2000) (“[I]t is well established that patent drawings do not define the precise proportions of the elements and may not be relied on to show particular sizes if the specification is completely silent on the issue.”). Thus, a preponderance of the evidence

fails to support the Examiner's finding that Figure 3D shows "a spring having one end not attached to the energy manipulation device," as claimed.

Accordingly, we do not sustain the Examiner's rejection of independent claim 26, and claims 27–30 depending therefrom as being anticipated by Draper.

Rejection IV

Claims 31 and 32 depend indirectly from claim 26. Appeal Br. 33 (Claims App.). The Examiner's rejection of claims 31 and 32 as unpatentable over Draper and Atkinson is based on the same unsupported findings in Draper discussed *supra*, and the Examiner does not rely on Atkinson to remedy the deficiencies of Draper. *See* Non-Final Act. 7.

Accordingly, for reasons similar to those discussed above, we do not sustain the rejection of claims 31 and 32 over Draper and Atkinson.

DECISION

The Examiner's rejection of claims 26–32 under 35 U.S.C. § 112, second paragraph, is REVERSED.

The Examiner's rejection of claims 26–32 under 35 U.S.C. § 112, first paragraph, is REVERSED.

The Examiner's rejection of claims 26–30 under 35 U.S.C. § 102(b) is REVERSED.

The Examiner's rejection of claims 31 and 32 under 35 U.S.C. § 103(a) is REVERSED.

CONCLUSION

In summary:

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
26-32	112, first paragraph	Indefiniteness		26-32
26-32	112, second paragraph	Written Description		26-32
26-30	102(b)	Draper		26-30
31, 32	103(a)	Draper and Atkinson		31, 32
Overall Outcome				26-32