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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* JÜRGEN VAN VLEM

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Appeal 2019-004458  
Application 14/832,950  
Technology Center 3700

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Before STEFAN STAICOVICI, MICHAEL L. HOELTER, and  
BRENT M. DOUGAL, *Administrative Patent Judges*.

HOELTER, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Pursuant to 35 U.S.C. § 134(a), Appellant<sup>1</sup> appeals from the Examiner's decision to reject claims 11–18, which constitute all the claims pending in this application. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM IN PART.

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<sup>1</sup> 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 “Cochlear Limited.” Appeal Br. 3.

### CLAIMED SUBJECT MATTER

The disclosed subject matter relates to cochlear implants, i.e., an auditory prosthesis. *See* Spec. ¶¶ 1, 2. Apparatus claim 11 is the sole independent claim, is illustrative of the claims on appeal, and is reproduced below.

11. An auditory prosthesis comprising:  
an implantable portion comprising:
  - a first anchor adapted to be secured to a first location in a recipient;
  - a second anchor adapted to be secured to a second location in the recipient; and
  - a deformable element disposed between the first anchor and the second anchor, wherein the deformable element is configured to automatically deform over a predetermined period of time to accommodate a separation between the first location and the second location due to anatomical growth.

### EVIDENCE

Name	Reference	Date
Abel et al (“Abel”)	US 2011/0106254 A1	May 5, 2011

### REJECTION

Claims 11–13 and 15–18 are rejected under 35 U.S.C. § 102(a)(1) as anticipated by Abel.

Claim 14 is rejected under 35 U.S.C. § 103 as unpatentable over Abel.

### ANALYSIS

*The rejection of claims 11–13 and 15–18 as anticipated by Abel*

Appellant presents distinct arguments for claims 11, 13, 15 (each argued separately) and for claims 17 and 18 (argued together). *See* Appeal Br. 11–24. No separate arguments are presented for dependent claims 12

and 16. Accordingly, we select claims 11, 13, 15, and 17 for review, with the remaining claims (i.e., claims 12, 16, and 18) standing or falling with their respective parent claim. *See* 37 C.F.R. § 41.37(c)(1)(iv).

Claim 11

Claim 11 includes the limitation of a deformable element “configured to automatically deform over a predetermined period of time . . . due to anatomical growth.” Appellant contends that Abel does not anticipate this limitation because “**Abel’s device compensates for changes in pressure caused by daily activities rather than separation due to anatomical growth as claimed.**” Appeal Br. 11.

The Examiner relies, in part, on Paragraph 6 of Abel for disclosing this limitation. *See* Final Act. 4. Paragraph 6 of Abel states, in part:

During its lifetime, *which may be many years*, an ORP [ossicular replacement prosthesis] may be subjected to billions of vibrating cycles in the audio frequency range and must, therefore, maintain its structure and function with minimal deterioration.

Emphasis added. The Examiner also states that in view of Paragraph 70 of Abel, “Abel allows for 0.5 mm to 1.0 mm deflection.” Ans. 4–5. The Examiner finds that, “the specification does not seem to give any special definition to the term [“anatomical growth”] other than any separation (including separations as small as or even smaller than 1 nm) occurring due to growth.” Ans. 4. Thus, the Examiner reasons, “[c]learly, anatomical growth resulting in 1 nm of separation could easily be accommodated and still allow for deflection.” Ans. 5.

Appellant acknowledges the Examiner’s reliance on Paragraphs 6 and 70 of Abel (*see* Appeal Br. 12, 15, Reply Br. 4), but contends “Abel’s

invention is structured to compensate for daily variations in pressure rather than the claimed accommodation of anatomical growth.” Appeal Br. 12; *see also id.* at 13, Reply Br. 4. In fact, after referencing Paragraph 70 of Abel, Appellant states, “[t]here is no indication on the record that deflection of merely ‘approximately [] 0.5 mm to 1.0 mm’ is sufficient to accommodate anatomical growth.” Appeal Br. 16. In response, the Examiner explains, however, “that ‘anatomical growth’ is not defined in claim 11.” Ans. 4. And, because claim 11 is silent as to the degree of anatomical growth required, the Examiner determines that due to Abel’s permitted deflection, “Abel could accommodate separations due to anatomical growth.” Ans. 4; *see also* Abel ¶ 56 (“ORP 100, is compliant (becomes deformable)”).

The Examiner’s reasoning is persuasive. Appellant does not persuasively explain how anatomical growth is not likely to occur over the stated lifetime (i.e., “many years”) of Abel’s prosthesis. Abel ¶ 6; *see also* Spec. ¶¶ 2 (“[a]s the skull of a juvenile grows”) 33 (“[i]n the described context, this predetermined length of time can be at least one year, and can accommodate anatomical growth during that year”). Nor does Appellant explain how the permitted deflection of approximately 0.5 mm to 1.0 mm fails to accommodate anatomical growth.

Appellant further states, “the Office Action gave no weight to the differences between accommodating separation due to anatomical growth and accommodating pressure changes caused by daily activities in Abel.” Appeal Br. 14; *see also* Reply Br. 2. However, the Examiner responds that “HOW the movement is caused is an intended use of the apparatus claims.” Ans. 5 (citations omitted). Appellant disagrees stating:

Whether Abel *could* accommodate the one nanometer of growth described by the Examiner's Answer is irrelevant to anticipation because claim 11 does not merely require a deformable element that "could" accommodate separation-the claim recites, *inter alia*, a deformable element *configured* to accommodate separation due to anatomical growth.

Reply Br. 3; *see also id.* at 6. Appellant continues, "the particular *configuration* of the deformable element creates structural differences compared to Abel's device." Reply Br. 3; *see also* Appeal Br. 16 ("Such attributes are different."). Appellant states, "Applicant's specification clearly describes these differences," and references Paragraph 33 thereof which, as per Appellant, "describes [] the leniency of a deformable element" as well as its behavior.<sup>2</sup> Appeal Br. 14.

The Examiner acknowledges Appellant's focus on the Specification in identifying structural differences, but states, "it is noted that the features upon which appellant relies are not recited in the rejected claims." Ans. 5. Appellant does not disagree, only stating "[t]he claimed recitation regarding the *configuration* of the deformable element results in structural differences from Abel." Reply Br. 5. In short, Appellant does not explain where these asserted structural differences are claimed, only that structural differences exist between their device and Abel's. Further, Appellant does not clearly identify what exactly are these structural differences. Appellant does not provide any evidence in support of this allegation, and it is not otherwise self-evident from the record. "Attorney's arguments in a brief cannot take the place of evidence." *In re Pearson*, 494 F.2d 1399, 1405 (CCPA 1974).

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<sup>2</sup> To be clear, Appellant is not disputing Abel's disclosure of a deformable element, only that Abel's element is not "structurally *configured* to accommodate the claimed separation." Reply Br. 3.

The Examiner also states, “[i]f the prior art structure is capable of performing the intended use, then it meets the claim.” Ans. 6. “Abel clearly discloses that the prosthesis can deform to allow[/]permit rectilinear and rotational movement between the two attachment points (par. 0015 and 0018 of Abel),” and that this can continue for “many years.” Ans. 5, Abel ¶ 6. Accordingly, the Examiner reasons, “Abel clearly discloses that the prosthesis can deform to accommodate movement that may be due to anatomical growth.” Ans. 6. Appellant’s argument is not persuasive of Examiner error on this point. Thus, and based on the record presented, we sustain the Examiner’s rejection of independent claim 11, and dependent claims 12 and 16.

### Claim 13

Claim 13 depends from claim 12, and recites “wherein the predetermined period of time comprises at least one year.” The Examiner again references Paragraph 6 of Abel (*see* Ans. 6) and Appellant acknowledges such reliance but argues that “a product lifetime of ‘many years’ . . . does not mean that Abel’s ORP is configured to *deform over* ‘many years.’” Reply Br. 8; *see also* Appeal Br. 17, Reply Br. 9.

We specifically note Abel’s disclosure that the “ORP may be subjected to billions of vibrating cycles” over its lifetime of “many years,” and also Abel’s description of its device as “compliant (becomes deformable).” Abel ¶¶ 6, 56. We further note Abel’s use of “an elastic material covering all or part of the ORP or other elastic means within the ORP.” Abel ¶ 21. In view of the foregoing, Appellant’s contention on this point is not persuasive of Examiner error.

Appellant also contends that the Examiner's rejection "overlooks the clear structural differences" between Appellant's device and that of Abel. Appeal Br. 17; *see also* Reply Br. 8. As the Examiner noted above, "the features upon which appellant relies are not recited in the rejected claim." Ans. 5. Appellant further discusses the characteristics of "a viscoelastic material" (Appeal Br. 18), but claim 13 is silent as to such material.

Accordingly, and for similar reasons discussed above, we are not persuaded of Examiner error. We sustain the Examiner's rejection of claim 13 as being anticipated by Abel.

#### Claim 15

Claim 15 depends from claim 11 and additionally recites "wherein the deformable element comprises a viscoelastic material." Appellant contends, "Abel as applied does not disclose or suggest a deformable element that comprises a viscoelastic material." Appeal Br. 19; *see also id.* at 20. The Examiner, on the other hand, explains:

Par. 0054 [of Abel] clarifies that the cover 126 may be formed of an elastomeric material, such a silicone. Silicone and elastomers are polymers, and ALL polymers have viscoelastic properties. As evidence of this intrinsic property, the Examiner presents a definition of 'viscoelasticity' from the *Academic Press Dictionary of Science and Technology* (4th ed.), which states that 'viscoelasticity' is 'The typical manifestation of this quality in a polymer; the shear viscosity is expressed by the relaxation time, which is the ratio of the viscous to the elastic characteristics in the determinant property.[']' Additionally, the Examiner has provided a PDF of a text book entitled 'Introduction to Polymer Viscoelasticity' as further support as to the inherency of the disclosed elastomer being viscoelastic (see Introduction and Preface for broad definition; additional chapters go into detail of the viscoelastic models and properties).

Ans. 6-7.

Appellant does not respond or rebut these statements or these references identified by the Examiner. *See Reply Brief generally.* Thus, Appellant is not persuasive of Examiner error on this point. Accordingly, we sustain the Examiner's rejection of claim 15 as being anticipated by Abel in view of Abel's disclosure of using silicon, which is understood to be a "deformable element [that] comprises a viscoelastic material" as recited.

Claim 17

Claim 17 depends from claim 11 and recites a prosthesis "further comprising an acoustic actuator disposed between the first anchor and the second anchor." Appellant contends, Abel "**does not disclose the claimed acoustic actuator.**" Appeal Br. 21. The Examiner disagrees stating "[a]ll embodiments of Abel disclose a piston 22/122/222 that moves due to acoustic vibrations" and that "[t]his appears to be exactly what an 'acoustic actuator' is." Ans. 7.

Appellant's Specification employs the term "acoustic actuator" in terms of an "actuator element" (Spec. ¶ 25), but this term is also understood as simply an "actuator" (Spec. ¶ 17). Appellant seeks to differentiate the operation of Abel's piston-type actuator by stating "an acoustic actuator is a component that *generates* motion rather than merely being able to conduct motion generated elsewhere." Appeal Br. 22, Reply Br. 11.

Such differentiation is not consistent with the description in Appellant's Specification. For example, Paragraph 18 of Appellant's Specification provides guidance as to the operation of Appellant's actuator stating "stimulator unit 220 generates drive signals that cause actuation of actuator 240. This actuation is transferred to stapes prosthesis." Thus, Appellant's Specification describes a more passive actuation device that

awaits receipt of a signal before actuating and transferring such actuation further along. Abel operates in a same manner. For example, Abel describes a deformable coupling exposed to sound vibrations originating with the eardrum and stating “these vibrations may be transmitted across the coupling means with minimal acoustic damping or attenuation.” Abel ¶ 13. Hence, Appellant’s contention that an “actuator is a component that *generates* motion” is not wholly consistent with Appellant’s Specification. Regardless, the Examiner states that using “the appellant’s definition, and especially given the lack of recited structure in the claim as to what, exactly, constitutes an acoustic actuator,” the Examiner reasons that Abel’s piston device 22/122/222 “appears to be exactly what an ‘acoustic actuator’ is.” Ans. 7.

The Examiner has the better position on this point. Accordingly, we are not persuaded the Examiner erred in rejecting claims 17 and 18 as being anticipated by Abel. We sustain their rejection.

*The rejection of claim 14 as unpatentable over Abel*

Claim 14 depends from claim 11 and further recites, “wherein the first anchor comprises a bone screw and wherein the second anchor comprises at least one of a stapes prosthesis and an ossicular chain prosthesis.” The Examiner references Paragraphs 7, 21, and 52 of Abel as rendering this limitation obvious. *See* Final Act. 6, Ans. 7. Appellant does not address the recitation to a bone screw, but contends that “**Abel describes a deformable element that is part of an ossicular chain prosthesis rather than between a bone screw and a stapes or ossicular chain prosthesis.**” Appeal Br. 24.

To be clear, the “**between**” language relied upon by Appellant above can be found in parent claim 11. The Examiner does not explain how Abel’s

prosthesis can be said to be “between” anchors 40, 42 (*see* Abel Fig. 2) for purposes of claim 11 (“acoustic actuator disposed between the first and second anchor” (Final Act. 4)), yet, at the same time, also satisfy the claim 14 limitation that one of the anchors be the prosthesis itself. Unlike Appellant’s device, which separates actuator 240 from stapes prosthesis 254 (Spec. para 17, Fig. 1B), Abel discloses and describes an ‘all-in-one’ unit. *See* Abel *generally*. Thus, while Abel can satisfy the “between” limitation of claim 11 (*see* Abel Fig. 2 depicting ORP 10 between attachments points 40, 42), there is no indication that Abel’s ORP is also one of the anchors as per the claim 14 limitation. Indeed, Abel disclose various devices that can connect to Abel’s ORP for anchoring purposes (*see* Abel ¶¶ 7, 52), yet nowhere is it made clear that one of the anchoring devices itself is Abel’s ORP.

Accordingly, and based on the record presented, the Examiner has not explained how, for claim 14 purposes, Abel satisfies the requirement that the deformable element (i.e., Abel’s ORP (*see* Abel ¶ 21)) be both between the anchors and also be an anchor. We reverse the Examiner’s rejection of claim 14 as being unpatentable over Abel.

### CONCLUSION

In summary:

<b>Claims Rejected</b>	<b>35 U.S.C. §</b>	<b>Reference</b>	<b>Affirmed</b>	<b>Reversed</b>
11–13, 15–18	102(a)(1)	Abel	11–13, 15–18	
14	103	Abel		14
<b>Overall Outcome</b>			11–18	

Appeal 2019-004458  
Application 14/832,950

No period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1). *See* 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED IN PART