

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte PAUL F. MULLER

Appeal 2008-4493
Application 10/285,322
Technology Center 3700

Decided: September 25, 2008

Before JENNIFER D. BAHR, ANTON W. FETTING, and STEFAN STAICOVICI *Administrative Patent Judges.*

STAICOVICI, *Administrative Patent Judge.*

DECISION ON APPEAL

STATEMENT OF THE CASE

Paul F. Muller (Appellant) appeals under 35 U.S.C. § 134 from the Examiner's decision rejecting claims 1 through 22. We have jurisdiction over this appeal under 35 U.S.C. § 6 (2002).

THE INVENTION

The Appellant's invention is drawn towards an embolic filtering device 20 including an expandable filter assembly 22 having a self-expanding, single-wire cage 24 and a filter element 26 (Spec. 11, ll. 14-18

and fig. 1). The single-wire cage 24 has a first end 50 and a second 52 rotatably mounted on the distal end of a guide wire (Spec. 14, ll. 15-17 and 25-26 and fig. 2).

Claim 1, the only independent claim, is illustrative of the claimed invention and reads as follows:

1. An embolic filtering device used to capture embolic debris in a body vessel, comprising:
 - a filter assembly including an expandable cage adapted to move between an unexpanded position and an expanded position and a filter element attached to the expandable cage, the cage forming an structure capable of opening the filter element and maintaining the filter element open until the cage is placed in the unexpanded position; and
 - an elongated member having a distal end and a proximal end, the expandable cage being coupled to the elongated member near the distal end, wherein the cage is made from a single, continuous wire having a first end coupled to the elongated member near the distal end and a second end coupled to the elongated member near the distal end, the first end and second end being spaced apart along the longitudinal axis of the elongated member.

THE REJECTIONS

The Examiner relies upon the following as evidence of unpatentability:

Borillo US 2003/0060844 A1 Mar. 27, 2003

The following rejections are before us for review:

Claims 1-4, 8, 9, 14, and 16 stand rejected under 35 U.S.C. § 102(e) as anticipated by, or in the alternative, under 35 U.S.C. § 103(a) as unpatentable over Borillo.

Claims 5-7, 10-13, 15, and 17-22 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Borillo.

The Examiner provides reasoning in support of the rejections in the Answer (mailed September 27, 2007). The Appellant presents opposing arguments in the Appeal Brief (filed June 22, 2007) and the Reply Brief (filed November 27, 2007).

OPINION

Claims 1-4, 8, 9, 14, and 16

The Appellant argues the rejection of claims 1-4, 8, 9, 14, and 16 together as a group (App. Br. 8). Therefore, in accordance with 37 C.F.R. § 41.37(c)(1)(vii), we have selected claim 1 as the representative claim to decide the appeal, with claims 2-4, 8, 9, 14, and 16 standing or falling with claim 1.

The Examiner found that Figure 6 of Borillo discloses a filter assembly (embolic filtering device) including an elongate member 228 (guidewire), a filter element 222, and an expandable cage formed by single, continuous wire 220 having a first end 224 and a second end 226 coupled to a distal portion of the elongate member 228 (Ans. 3, citing to Non-Final Rejection at 2, mailed on June 21, 2006).

The crux of the Appellant's argument is that the filter cage of Borillo is formed by a plurality of wires, not a single, continuous wire, as required by claim 1 (App. Br. 9). Specifically, the Appellant argues that the "use of

the word ‘single’ limits the device to a cage made from only one wire, not multiple wires” (Reply Br. 4).

In response, the Examiner takes the position that “[e]ach of the wires 220 of Borillo et al. forms a cage since it encloses a space due to its helical shape which extends 360 degrees around the elongate member” (Ans. 3). The Examiner then concludes that the four wires 220 of Borillo form four cages, whereby each cage is formed by a single wire (Ans. 3).

According to our understanding of the Appellant’s arguments and the Examiner’s response, it appears that the crux of the disagreement is what constitutes a filter cage in the embolic filtering device of Borillo. The Appellant contends that the filter cage is formed by all the wires 220, and hence is formed by multiple wires. In contrast, the Examiner takes the position that the filter cage is formed by a single wire 220 and, as such, the embolic filtering device of Borillo includes in fact four filtering cages. We think the Examiner has the better argument here.

The Appellant’s filter assembly 22 (filter cage) has a helical shape and is designed to support, and to expand and collapse, the filtering element 26 (Spec. 6, ll. 16-24) and figs. 1 and 2. Borillo specifically discloses that each wire 220 has a helical shape that rotates about the elongate member 228 from about 45° to 360° (¶ 55 and fig. 6). Borillo further discloses that each wire supports, expands, and collapses the filter element because each wire is connected to the filter member (¶ 40). Therefore, we find that one ordinarily skilled in the art would understand that each wire 220 in the embolic filtering device of Borillo constitutes a filter cage because each wire has a helical shape and supports, expands, and collapses a filter element. Furthermore, we note that the use of the transitional term “comprising”,

which is synonymous with “including,” “containing,” or “characterized by,” is inclusive or open-ended and does not exclude additional, unrecited elements or method steps. *See Mars Inc. v. H.J. Heinz Co.*, 377 F.3d 1369, 1376 (Fed. Cir. 2004). As such, we agree with the Examiner that the use of “the term ‘comprising’ in claim 1...does not preclude other cages or wires...from being present in the filtering device” (Ans. 4).

Lastly, the Appellant argues that even “if the Examiner was correct in stating that there are four separate cages disclosed in the Borillo application, there should be four filter members 222 disclosed and associated with these four alleged cages” (App. Br. 9). We find the Appellant’s argument unpersuasive because claim 1 is not limited to a “single” filter element connected to “a cage made from a single, continuous wire”. In other words, claim 1 is not so limiting as to require that a “single” filter element correspond to a “single” cage. Claim 1 is broader than the Appellant’s interpretation in that it merely requires that “a filter element [is] attached to the expandable cage.” Claim 1 does not exclude a filtering element attached to more than one expandable cage. As shown above, the filter member in the embolic filtering device of Borillo is connected to each wire (¶¶ 14, 40, and 55); hence the filter member is attached to each expandable cage. Stated otherwise, Borillo’s filtering element 26 is attached to an expandable cage made from a single continuous wire (one of the wires 220) and is attached to three other expandable cages each made from a single continuous wire (the other wires 220). Therefore, the embolic filtering device of Borillo satisfies the limitation of claim 1 of “a filter element attached to the expandable cage.”

For the reasons discussed above, the Appellant's arguments do not demonstrate error in the Examiner's rejection of claim 1, and claims 2-4, 8, 9, 14, and 16 standing or falling with claim 1. Accordingly, the rejection of claim 1, and claims 2-4, 8, 9, 14, and 16 standing or falling with claim 1, is sustained.

Claims 5-7, 10-13, 15, and 17-22

With respect to claims 5-7, 10-13, 15, and 17-22 the Appellant argues that the Examiner merely relies on broad statements that the elements shown in claims 5-7, 10-13, 15, and 17-22 are well-known in the art without providing secondary references as support and "...has provided no plausible motivation to combine these additional structures with the filter basket disclosed in [the] Borillo" (App. Br. 11).

At the outset, we agree with the Examiner that the Appellant has not disputed the Examiner's statements of what was well-known in the art (Non-Final Rejection at 4, mailed on June 21, 2006) and as such, the facts set forth in the statements are taken to be admitted prior art.¹ In the absence of any specific allegation that the Examiner's statements of what was well-known in the art are not accurate, the Examiner was not required to provide secondary references to illustrate that the elements shown in claims 5-7, 10-13, 15, and 17-22 are well-known in the art.

With respect to the Appellant's argument that the Examiner has provided no plausible motivation to combine these known prior art features with Borillo's filter basket, we note that while the requirement of

¹ If an applicant does not seasonably traverse the taking of official notice during examination, then the object of the official notice is taken to be admitted prior art. *In re Chevenard*, 139 F.2d 711, 713 (CCPA 1943).

demonstrating a teaching, suggestion, or motivation (the TSM test established by the Court of Customs and Patent Appeals) to combine known elements in order to show that the combination is obvious may be “a helpful insight,” it cannot be used as a rigid and mandatory formula. *KSR Int'l. Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1741 (2007).

If a technique has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious unless its actual application is beyond his or her skill. *Id.* at 1740. In determining whether the subject matter of a claim is obvious, “neither the particular motivation nor the avowed purpose of the [applicant] controls. What matters is the objective reach of the claim.” If the claim extends to what is obvious, it is unpatentable under § 103. *Id.* at 1741-42. Moreover, while there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness, “the analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ.” *Id.* at 1741. In this case, for example with respect to claim 5, the Examiner takes the position that “it is old and well-known in this art to rotatably mount a filter to a guide wire in order to obtain the advantage of allowing the filter to remain stationary relative to the blood vessel while the guidewire is rotated” (Non-Final Rejection at 3, mailed on June 21, 2006) (underlining added). Similarly, with respect to claims 6 and 22, the Examiner takes the position that “it is old and well-known in this art to use stop fittings to mount a filter to a guide wire in order to obtain the advantage of limiting the movement of the filter

relative to the guidewire” (Non-Final Rejection at 3, mailed on June 21, 2006) (underlining added). In regard to claim 10, the Examiner takes the position that “it is old and well-known in this art to shape wires on filter cages as ribbons in order to obtain the advantage of making it compact when collapsed” (Non-Final Rejection at 3-4, mailed on June 21, 2006) (underlining added). Finally, with respect to claims 15 and 20, the Examiner takes the position that “it is old and well-known in this art to make a guidewire tubular in order to obtain the advantage of permitting medication to flow therethrough into the patient (Non-Final Rejection at 4, mailed on June 21, 2006) (underlining added). By identifying a benefit, the Examiner has provided an “articulated reasoning” that would have prompted a person of ordinary skill in the art to modify the structure of Borillo so as to establish that the subject matter of claims 5-7, 10-13, 15, and 17-22 is obvious. A person of ordinary skill in the art would readily appreciate that the benefits gained by providing the elements recited in claims 5-7, 10-13, 15, and 17-22 could also be achieved in the embolic filtering device of Borillo. After all, “[a] person of ordinary skill is also a person of ordinary creativity, not an automaton.” *Id.* at 1742. Furthermore, modifying the embolic filtering device of Borillo to include the elements of claims 5-7, 10-13, 15, and 17-22 would not have been uniquely challenging to a person of ordinary skill in the art because it is no more than “the simple substitution of one known element for another or the mere application of a known technique to a piece of prior art ready for the improvement.” *Id.* at 1741. Therefore, the modification appears to be the product not of innovation but of ordinary skill and common sense.

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In conclusion, the Appellant's arguments do not persuade us the Examiner erred in rejecting claims 5-7, 10-13, 15, and 17-22. Therefore, the rejection of claims 5-7, 10-13, 15, and 17-22 is sustained.

DECISION

The decision of the Examiner to reject claims 1-4, 8, 9, 14, and 16 under 35 U.S.C. § 102(e) as anticipated by, or in the alternative, under 35 U.S.C. § 103(a) as unpatentable over Borillo is affirmed.

The decision of the Examiner to reject claims 5-7, 10-13, 15, and 17-22 under 35 U.S.C. § 103(a) as unpatentable over Borillo is affirmed.

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)(1)(iv) (2007).

AFFIRMED

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