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BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte GEOFFREY PHILLIP DOBSON

Appeal 2017-008657
Application 13/899,060
Technology Center 1600


SCHNEIDER, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal under 35 U.S.C. § 134 involving claims to methods for reducing tissue damage, which have been rejected as obvious and for non-statutory obviousness-type double patenting. We have jurisdiction under 35 U.S.C. § 6(b).

We REVERSE.

STATEMENT OF THE CASE

A majority of open-heart surgeries involve arresting the heart for periods of up to three hours or more. Spec. 1–2. Stopping the heart for

1 Appellant identifies the Real Party in Interest as Hibernation Therapeutics, A KF LLC. Br. 4.
prolonged periods increases the likelihood that the heart will not recover function. *Id.* The Specification describes a method for reducing organ damage during periods of reduced activity such as cardioplegia. Spec. 2.

Claims 12–14 and 16–28 are on appeal. Claim 12 is illustrative and reads as follows:

Claim 12. A method of reducing damage to a tissue, organ or cell resulting from cardioplegia comprising administering an additive composition comprising a potassium channel opener/agonist and/or an adenosine receptor agonist, together with a local anaesthetic and magnesium cations wherein the composition is administered when reperfusing the organ during the recovery phase of a surgical procedure.

The claims stand rejected as follows:

Claims 12–14, 16–22, 26, and 27 have been rejected on the grounds of non-statutory obviousness type double patenting over claims 1–6, 9, 12–14, and 16–19 of Dobson ‘814.’

Claims 12–14, 16–23, 26, and 27 have been rejected under 35 U.S.C. § 103(a) as unpatentable over Dobson ‘145.’

Claims 24 and 25 have been rejected under 35 U.S.C. § 103(a) as unpatentable over Dobson ‘145 in view of Gao.”

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3 Dobson, WO 00/56145 A1, published Sept. 28, 2000 (“Dobson ‘145”).
Claim 28 has been rejected under 35 U.S.C. § 103(a) as unpatentable over Dobson ‘145 in view of Takeuchi.\(^5\)

**OBVIOUSNESS**

*Issue*

The issue with respect to this rejection is whether a preponderance of the evidence supports the Examiner’s conclusion that the subject matter of claims 12–14, 16–22, 26, and 27 would have been obvious over Dobson ‘145.

The Examiner finds that Dobson ‘145 discloses a method for reducing damage to the heart resulting from cardioplegia comprising administering a composition comprising adenosine, lidocaine, magnesium cations, potassium, an antioxidant, and glucose. Final Act. 5–6. The Examiner finds that Hobson ‘145 teaches that the composition is administered while perfusing and reperfusing the heart during arrest as well as during the recovery phase. *Id.* at 6. The Examiner concludes “It would have been *prima facie* obvious for one of ordinary skill in the art at the time of the present invention to employ the teachings of Dobson to devise Applicant's presently claimed method.” *Id.*

Appellant contends that Dobson ‘145 does not teach or suggest administering the composition during reperfusion during the recovery phase of a surgical procedure. Br. 17. Appellant contends that Dobson only teaches administration during the arrest and maintenance phases and not

during the recovery phase. Id. at 18. Appellant contends that Dobson ‘145 is
directed to minimizing damage during a heart attack or where the heart stops
because of a physically induced injury. Id. at 19–20. Appellant contends
that the claimed method produces unexpected results sufficient to overcome
a prima facie case of obviousness. Id. at 21–22.

Principles of Law

In proceedings before the Patent and Trademark Office,
the Examiner bears the burden of establishing a prima facie
case of obviousness based upon the prior art. ‘[The Examiner]
can satisfy this burden only by showing some objective
teaching in the prior art or that knowledge generally available to
one of ordinary skill in the art would lead that individual to
combine the relevant teachings of the references.’ The patent
applicant may then attack the Examiner’s prima facie
determination as improperly made out, or the applicant may
present objective evidence tending to support a conclusion of
nonobviousness.

In re Fritch, 972 F.2d 1260, 1265 (Fed. Cir. 1992)

Analysis

We have considered the parties’ arguments and find that Appellant
has the better position. The Examiner has not shown that Dobson ‘145
teaches or suggests administration of the claimed composition while
reperfusing the organ during the recovery phase of a surgical procedure.
Because Dobson ’145 does not teach or suggest all on the limitations of the
claim, and the Examiner has not shown that a person of ordinary skill would
otherwise incorporate the missing limitations into the method taught by Dobson ‘145, we determine that a prima facie case of obviousness has not been made. *In re Ochiai*, 71 F.3d 1565, 1572 (Fed. Cir. 1995).

The Examiner contends that Dobson ‘145 teaches that administration of the composition can occur “before, during, or following a cardiovascular intervention” such as open heart surgery. Ans. 12. The Examiner argues that reperfusion of the organ occurs after surgery and thus falls within the teaching of Dobson ‘145 that the administration occur following intervention. *Id.* Alternatively, the Examiner contends that Dobson ‘145 teaches that administration can occur at any point during the open-heart surgery which would include the recovery phase. *Id.* Finally, the Examiner contends that Dobson ‘145 expressly teaches administration to protect the heart from reperfusion injury.

We have considered the Examiner’s arguments and find them unpersuasive.

As Appellant has demonstrated, one skilled in the art would consider the reperfusion stage to be part of an open-heart procedure and not an event which follows the procedure. Br. 18–19; Dobson Decl. ¶ 7. We agree with Appellant that the teaching on Dobson ‘145 relating to administration following intervention does not teach or suggest the claimed method. Br. 13.

With respect to Dobson ‘145 teaching that the administration can be administered at any time during the procedure, we agree with Appellant that a proper reading of Dobson ‘145 would lead one skilled in the art to administer the composition either during the arrest or maintenance phases of
the surgery and not during the reperfusion phase. Br. 18. For example, in example 1 of Dobson ‘145, the composition recited in the claims was only administered during the arrest and maintenance phases and not during reperfusion. Dobson ‘145 16–17.

With respect to Dobson ‘145 expressly teaching administration to prevent reperfusion injury, the teaching regarding reperfusion injury related to reperfusion after a clot has been dissolved and not with respect to perfusion that occurs as part of open-heart surgery. Dobson ‘145, 5 at ll. 7–11. The Examiner has not shown any teaching in Dobson ‘145 or in the other references that a teaching with respect to administration of the composition following blood clot removal would lead one skilled in the art to use the composition during reperfusion during open-heart surgery or another surgical procedure.

Conclusion of Law

We conclude that a preponderance of the evidence does not support the Examiner’s conclusion that claims 12–14, 16–23, 26, and 27 would have been obvious over Dobson ‘145.

The remaining rejections under 35 U.S.C. § 103(a) rely on the same teachings of Dobson ‘145. For the reasons stated above, we reverse those rejections.

OBVIOUSNESS-TYPE DOUBLE PATENTING

Appellant and the Examiner agree that overcoming the rejections under 35 U.S.C. § 103(a) over Dobson ‘145 would also overcome the double patenting rejection. As discussed above, we have reversed the rejections.
based on Dobson ‘145. Br. 16. Therefore, we also reverse the rejection for obviousness-type double patenting.

SUMMARY

We reverse the rejections under 35 U.S.C. § 103(a).

We reverse the rejection for non-statutory obviousness-type double patenting.

REVERSED