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EXAMINER	
OUYANG, BO	

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3794	

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte MARTIN R. WILLARD and
PATRICK A. HAVERKOST

Appeal 2018-003144
Application 14/327,154
Technology Center 3700

Before: JENNIFER D. BAHR, LEE L. STEPINA, and
BRENT M. DOUGAL, *Administrative Patent Judges*.

DOUGAL, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellant appeals under 35 U.S.C. § 134 from a Final rejection of claims 1, 3, 4, 6, 8–14, 16–19, and 21–25.[1] We have jurisdiction under 35 U.S.C. § 6(b).

We REVERSE.

[1] We use the word Appellant to refer to "applicant" as defined in 37 C.F.R. § 1.42(a). Appellant identifies the real party in interest as Boston Scientific Scimed, Inc. Appeal Br. 3.

CLAIMED SUBJECT MATTER

The claims are directed to devices and systems for nerve modulation. Claims 1, 13, and 19 are independent. Claim 1, reproduced below, is illustrative of the claimed subject matter:

> 1. An intravascular nerve modulation system, comprising:
> an outer elongate shaft having a proximal end, a distal end, and a lumen extending therebetween;
> an inner elongate shaft having a proximal end and a distal end;
> an expandable basket having a proximal end and a distal end, the proximal end of the expandable basket affixed adjacent to the distal end of the outer elongate shaft;
> an electrode assembly that comprises a flexible circuit comprising one or more electrodes affixed adjacent to the expandable basket;
> an inner cover disposed over an inner surface of the expandable basket; and
> an outer cover disposed over the outer surface of the expandable basket;
> wherein the flexible circuit is disposed between the inner cover and the outer cover; and
> wherein the system does not comprise an inflation lumen.

REFERENCES

The prior art relied upon by the Examiner in rejecting the claims on appeal is:

Hassett	US 6,251,109 B1	June 26, 2001
Flaxmeier	US 2006/0129143 A1	June 15, 2006
Steinke	US 2008/0161801 A1	July 3, 2008

REJECTIONS[2]

Claims 1, 3, 4, 6, 8–14, 16–19, and 22–24 are rejected under 35 U.S.C. § 103 as being unpatentable over Steinke and Flaxmeier.

Claims 21 and 25 are rejected under 35 U.S.C. § 103 as being unpatentable over Steinke, Flaxmeier, and Hassett.

OPINION

Claim 1 requires, *inter alia*: an expandable basket and a flexible circuit which are both sandwiched between an inner cover and an outer cover. The Examiner finds that Steinke teaches the features of the independent claims, except for the inner cover. Final Act. 3–4. The Examiner finds that Flaxmeier discloses a device similar to Steinke that has an inner cover, namely filter membrane 40. *Id.* at 4. The Examiner determines that it would have been obvious to modify Steinke to include Flaxmeier's filter membrane to "allow for the inner cover to filter and trap particles during treatment, to prevent these particles from circulating in the blood stream." *Id.* at 5.[3] Independent claims 13 and 19 include similar limitations and are rejected under this same basis.

Appellant argues persuasively that "the presence of an outer cover (barriers 66, 68) [in Steinke] over the inner filter membrane [as modified by Flaxmeier] would block the flow of fluid from passing through the filter membrane and defeat the purpose of the filter membrane, which is to act as a filter, by blocking fluid from reaching the filter." Appeal Br. 12.

[2] The Advisory Action indicates that the rejection under 35 U.S.C. § 112, second paragraph was overcome. Adv. Act. 1.
[3] The Examiner has an alternative rejection of claims 1 and 6 that ultimately also relies on the aspects of Steinke and Flaxmeier highlighted.

> Concerning the purpose of the barriers 66, 68, Steinke teaches:
>
> Barriers 66, 68 inhibit any ablation debris and gases generated adjacent electrodes 50 from traveling within the body lumen beyond catheter 12. Barriers 66, 68 also allow an at least partially isolated ablation environment to be established within the body lumen, for example, by replacing blood within a blood vessel with a more advantageous fluid environment for limiting charring of the electrodes and the like.

Steinke ¶ 84. This is best shown in annotated Figure 10B, reproduced below.

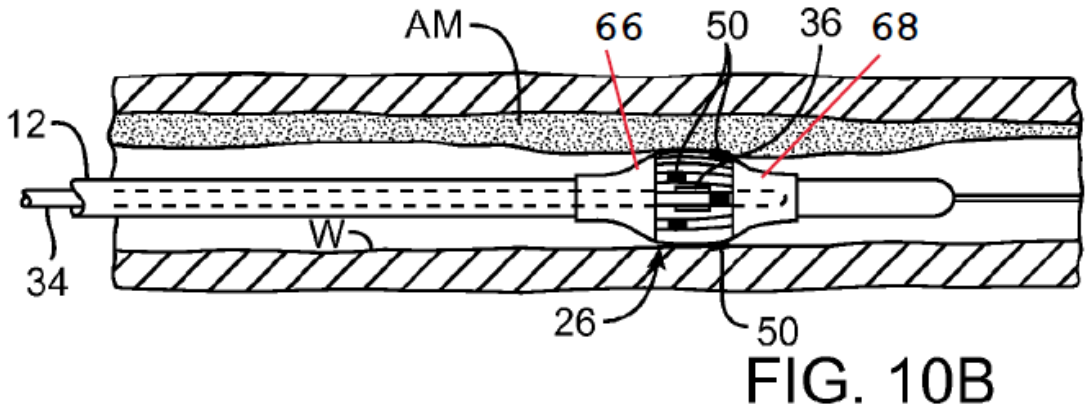

FIG. 10B

Annotated Figure 10B shows Steinke's ablation device in a blood vessel.

As can be seen above, the barriers 66, 68 can create a pocket or isolated environment where the electrodes contact the blood vessel. In this way any debris from the ablation can be contained and removed. It is unclear what purpose Flaxmeier's filter inside of Steinke's barriers would serve. The Examiner states that the reason for adding the filter is "to prevent . . . particles [resulting from the treatment] from circulating in the blood stream." Final Act. 5. In Flaxmeier, the filter is positioned in the blood flow and prevents particles from being carried off with the blood. Flaxmeier ¶ 55. However, this purpose is already served by the barriers 66, and 68, as

well as by the additional barriers mentioned by Steinke (Steinke ¶ 84) and cited by the Examiner (Ans. 2). If Steinke were modified to include a filter inside of the barriers, the filter would not serve the same purpose and would in fact be prevented by the barriers from functioning as taught by Flaxmeier as the filter would be inside of the barriers, which would prevent the filter from filtering debris from blood flow. Thus, the Examiner's reasoning for the proposed combination of the teachings of Steinke and Flaxmeier is not supported by rational underpinnings.

For these reasons we do not sustain the Examiner's rejections.

DECISION SUMMARY

In summary:

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
1, 3, 4, 6, 8–14, 16–19, 22–24	103	Steinke, Flaxmeier		1, 3, 4, 6, 8–14, 16–19, 22–24
21, 25	103	Steinke, Flaxmeier, Hassett		21, 25
Overall Outcome				1, 3, 4, 6, 8–14, 16–19, 21–25

REVERSED