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Table with 5 columns: APPLICATION NO., FILING DATE, FIRST NAMED INVENTOR, ATTORNEY DOCKET NO., CONFIRMATION NO. Includes details for application 11/591,193, inventor Richard T. Stone, attorney SHUMAKER & SIEFFERT, P. A., examiner LAVERT, NICOLE F, art unit 3762, and notification date 03/04/2013.

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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* RICHARD T. STONE, WARREN W. BALL, CARL D. WAHLSTRAND, STEVEN M. GOETZ, and LYNN M. OTTEN

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Appeal 2012-001263<sup>1</sup>  
Application 11/591,193  
Technology Center 3700

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Before DONALD E. ADAMS, STEPHEN WALSH, and ERICA A. FRANKLIN, *Administrative Patent Judges*.

ADAMS, *Administrative Patent Judge*.

DECISION ON APPEAL

This appeal under 35 U.S.C. § 134 involves claims 1, 3-8, 10, 11, 13-17, 19-21, 23-28, and 30 (App. Br. 3; Ans. 3). We have jurisdiction under 35 U.S.C. § 6(b).

STATEMENT OF THE CASE

“Implantable electrical stimulators may be used to deliver electrical stimulation therapy to patients to treat a variety of symptoms or conditions

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<sup>1</sup> This Appeal is related to Appeal No. 2011-011896, Application No. 11/591,176.

such as chronic pain, tremor, Parkinson's disease ... or gastroparesis. In general, an implantable stimulator delivers neurostimulation therapy in the form of electrical pulses" (Spec. 1: ¶ [0003]). Appellants' invention relates to medical devices and, more particularly, to user interfaces for configuring electrical stimulation therapy" (*id.* at ¶ [0002]). Appellants' claims are directed to a method (claims 1 and 3-8); a system (claims 11, 13-17, 19, and 20); and a computer-readable medium (claims 21, 23-28, and 30). Claims 1, 4, 5, 10, 11, and 21 are representative and are reproduced in the Claims Appendix of Appellants' Brief.

Claims 1, 3-8, 11, 13-17, 20, 21, and 25-28 stand rejected under 35 U.S.C. § 103(a) as unpatentable over the combination of Bauhahn<sup>2</sup> and McIntyre.<sup>3</sup>

Claims 10, 19, and 30 stand rejected under 35 U.S.C. § 103(a) as unpatentable over the combination of Bauhahn, McIntyre, and Mann.<sup>4,5</sup>

We affirm.

#### ISSUE

Does the preponderance of evidence on this record support a conclusion of obviousness?

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<sup>2</sup> Bauhahn, et al., WO 01/83028 A1, published November 8, 2001.

<sup>3</sup> McIntyre et al., US 2006/0017749 A1, published January 26, 2006.

<sup>4</sup> Mann et al., US 6,622,048 B1, issued September 16, 2003.

<sup>5</sup> Examiner's statement of the rejection fails to include Mann (*see* Ans. 7). Appellants' Brief correctly recites the references relied upon in the rejection of claims 10, 19, and 30 (App. Br. 8; *see also id.* at 20). Therefore, we find Examiner's failure to include Mann in the statement of the rejection to represent a harmless typographical error.

FACTUAL FINDINGS (FF)

FF 1. Bauhahn suggests a method, system, and computer-readable medium “for patient directed therapy management in an implantable neuro stimulator (INS)” (Bauhahn 4: 3-4; Ans. 5).

FF 2. Bauhahn’s method comprises:

storing preset clinician therapy programs with preset therapy settings in an INS device; accessing the preset clinician therapy programs by the patient, via telemetry communication between the INS device and a patient programmer; modifying at least one of the accessed preset clinician therapy programs on a patient programmer to create at least one personalized therapy program with personalized therapy settings; and storing the personalized therapy program in the INS device for subsequent use by the patient.

(*Id.* at ll. 5-10; Ans. 5-6.)

FF 3. Bauhahn suggests that “[a] patient can ... select from ... clinician preset therapy programs or from ... newly created and stored personalized therapy settings in accordance with the activity and/or preference of the patient” (*id.* at ll. 10-13; Ans. 5).

FF 4. McIntyre suggests “brain stimulation models, systems, devices, and methods” (McIntyre, Abstract).

FF 5. McIntyre’s “system ... includes a user interface with a display, such as to display the volume of influence in conjunction with the volumetric imaging data ..., which may be annotated or segmented using anatomic boundaries obtained from the anatomic atlas ..., or otherwise” (McIntyre 9-10: ¶ [0085]; Ans. 6).

FF 6. Bauhahn suggests that various “physician defined programs or preset clinician therapy programs (PCTP[s])” are “stored in the INS memory,”

wherein “each PCTP ... includes particular Preset Clinician Therapy Setting (PCTS) ... such as stimulation amplitude, rate, pulse width, electrode polarities, and directional sequence” (Bauhahn 12: 3-13; Ans. 5 (Bauhahn suggests “selecting one or more templates based on a comparison of at least one of the volumes and shapes of the one or more templates and the user defined stimulation parameters”); *see also* Bauhahn 12: 27-30 (“the patient could decide to make no modifications to the PCTS ... (i.e. Amplitude1, Rate1, PW1 and Amplitude2, Rate2, PW2) of the chosen PCTPs ... and simply have this personalized therapy program ... be a combination of the two chosen PCTPs ... with their PCTS ... unmodified”)).

FF 7. Examiner relies on Mann to suggest “that it is known to use a threshold for an error value between a stimulation area and a target area (e.g., degree of mismatch)” (Ans. 8).

#### ANALYSIS

Based on the combination of Bauhahn and McIntyre, Examiner concludes that, at the time Appellants’ invention was made, it would have been prima facie obvious to modify Bauhahn to include “the neurological modeling of target volume of influence and/or target volume of tissue,” suggested by McIntyre (Ans. 6). Examiner reasons that “[i]t would have been obvious to one having ordinary skill in the art to have modified the method, system and computer-readable medium” suggested by the combination of Bauhahn and McIntyre to select one or more volumetric stimulation templates that fill at least a portion of the stimulation field without covering any portion of the anatomical region not included in the stimulation field (*id.* at 7).

*Claim 1:*

Appellants contend that “[n]o one of ordinary skill in the art would interpret Bauhahn as suggesting modifying a preset clinical therapy program for personalization and then selecting a preset clinical therapy program based on the personalization” (App. Br. 10; *see also id.* at 12 (“In Bauhahn, a patient inputting stimulation parameters creates a new therapy program. The patient in Bauhahn does not select a preset clinician therapy program by inputting [a] stimulation parameter”)). We are not persuaded. Bauhahn suggests that “[a] *patient can ... select from ... clinician preset therapy programs* or from ... newly created and stored personalized therapy settings in accordance with the activity and/or preference of the patient” (FF 3 (emphasis added)).

Appellants contend that “in contrast to the requirements of claim 1, the selection of therapy programs in Bauhahn by the patient is not in response to receiving the stimulation input from the user, but rather in accordance with the activity and/or preference of the patient” (App. Br. 12). We are not persuaded. Bauhahn suggests that a user “selects” a particular program based on the particular activity and/or preference of the patient (FF 3). Therefore, notwithstanding Appellants’ contention to the contrary, the selection of a particular program is in direct response to receiving stimulation input from a user defining at least one stimulation field (*see* FF 3; *Cf.* App. Br. 12).

It would be common sense for a user to select a program that closely approximates the type of stimulation the user intends to receive. *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 421 (2007) (“A person of ordinary skill is also a person of ordinary creativity, not an automaton.”). Therefore, we are

not persuaded by Appellants' contention that the combination of Bauhahn and McIntyre fails to suggest "wherein the one or more selected predefined volumetric stimulation templates approximate the at least one stimulation field defined by the user" (App. Br. 12).

McIntyre suggests "a user interface with a display, such as to display the volume of influence in conjunction with the volumetric imaging data ..., which may be annotated or segmented using anatomic boundaries obtained from the anatomic atlas" (FF 5; *see also* App. Br. 13 (McIntyre does describe volumetric graphical representations of stimulation and patient anatomy")). Therefore, we are not persuaded by Appellants' contention that the combination of Bauhahn and McIntyre fails "to suggest displaying one or more selected predefined volumetric stimulation templates in conjunction with at least one stimulation field defined by a user over a visual representation of the anatomical region of the patient" (App. Br. 12). Notwithstanding Appellants' contention to the contrary, as Appellants' recognize, McIntyre suggests the use of graphical representations and therefore, the combination of Bauhahn and McIntyre makes obvious the use of McIntyre's graphical representations instead of Bauhahn's alphanumeric representations for the selection of a particular stimulation template (*see* App. Br. 13; *Cf.* FF 5). McIntyre suggests "volumetric graphical representations of stimulation and patient anatomy" and thereby adds graphical representations to Bauhahn's method and system (App. Br. 13; FF 5). Therefore, we are not persuaded by Appellants' contention that "[i]t is not apparent how ... McIntyre would further the ability of the system of Bauhahn to use patient preferences to modify therapy programs" (*id.* at 14).

*Claim 4:*

Appellants' contend that since Bauhahn does "not even mention volumes or shapes" the combination of Bauhahn and McIntyre fails to suggest "volumes and shapes of one or more volumetric stimulation templates" (App. Br. 18 (emphasis removed)). We are not persuaded.

Bauhahn suggests that various "physician defined programs or preset clinician therapy programs (PCTP[s])," wherein "each PCTP ... includes particular Preset Clinician Therapy Setting (PCTS) ... such as stimulation amplitude, rate, pulse width, electrode polarities, and directional sequence (FF 6). Appellants fail to explain why volumes and shapes corresponding to, *inter alia*, stimulation amplitude, rate, and pulse width are *not* volumes and shapes within the scope of Appellants' claimed invention.

*Claim 5:*

Appellants' claim 5 requires the selection of one or more volumetric stimulation templates comprising selecting one or more volumetric stimulation templates that fill at least a portion of the stimulation field without covering any portion of the anatomical region not included in the stimulation field (Appellants' Claim 5).

As discussed above, Examiner reasons that "[i]t would have been obvious to one having ordinary skill in the art to have modified the method, system and computer-readable medium" suggested by the combination of Bauhahn and McIntyre to select one or more volumetric stimulation templates that fill at least a portion of the stimulation field without covering any portion of the anatomical region not included in the stimulation field (Ans. 7). We agree. Therefore, we are not persuaded by Appellants'

contention that Examiner failed to establish a prima facie case of obviousness (App. Br. 19-20). *KSR*, 550 U.S. at 421 (“A person of ordinary skill is also a person of ordinary creativity, not an automaton.”).

*Claim 10:*

Having found no deficiency in the combination of Bauhahn and McIntyre, we are not persuaded by Appellants’ contention that Mann fails to overcome the deficiencies in the combination of Bauhahn and McIntyre (App. Br. 20; *Cf.* FF 7).

CONCLUSION OF LAW

The preponderance of evidence on this record supports a conclusion of obviousness.

The rejection of claims 1, 4, and 5 under 35 U.S.C. § 103(a) as unpatentable over the combination of Bauhahn and McIntyre is affirmed. Claims 3, 6-8, 11, 15-17, 20, 21, 23, and 26-28 are not separately argued and fall together with claim 1. Claims 13 and 24 are not separately argued and fall together with claim 4. Claims 14 and 25 are not separately argued and fall together with claim 5.

The rejection of claim 10 under 35 U.S.C. § 103(a) as unpatentable over the combination of Bauhahn, McIntyre, and Mann is affirmed. Claims 19 and 30 are not separately argued and fall together with claim 10.

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TIME PERIOD FOR RESPONSE

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

AFFIRMED

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