UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
12/240,947	09/29/2008	Quin C. HOELLWARTH	106842024800 (P6643US1)	6284

69753 7590 11/23/2018

APPLE c/o MORRISON & FOERSTER LLP LA
707 Wilshire Boulevard
Los Angeles, CA 90017

EXAMINER
SWARTHOUT, BRENT

ART UNIT	PAPER NUMBER
2689	

NOTIFICATION DATE	DELIVERY MODE
11/23/2018	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

EOfficeLA@mofo.com
PatentDocket@mofo.com
pair_mofo@firsttofile.com

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte QUIN C. HOELLWARTH

Appeal 2018-002069
Application 12/240,947
Technology Center 2600

Before ALLEN R. MacDONALD, ROBERT E. NAPPI, and KARA L. SZPONDOWSKI, *Administrative Patent Judges*.

SZPONDOWSKI, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant appeals under 35 U.S.C. § 134(a) from the Examiner's Non-Final Rejection of claims 1–26. We have jurisdiction under 35 U.S.C. § 6(b).

We REVERSE.

STATEMENT OF THE CASE

Appellant's invention is directed to a haptic feedback system. Spec. ¶ 1. Claim 1, reproduced below with formatting added and the disputed limitations in *italics*, is illustrative of the claimed subject matter:

> 1. A haptic feedback device comprising:
>
> a plurality of controllable nodes disposed between a first surface and a second surface,
>
> the controllable nodes being configurable to change between transmission states and non-transmission states so as to pass or block a haptic signal received from the second surface and provide a localized haptic response at the first surface when two or more of the controllable nodes are configured to pass the received haptic signal,
>
> *the plurality of controllable nodes being individually configurable to combine the haptic signal at one or more of a plurality of selectable regions to provide the localized haptic response.*

REJECTIONS

Claims 1, 2, 3, 4, 7–10, 15, 16, 21, and 22 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Furusho (US 2009/0021354 A1; published Jan. 22, 2009) and Martin et al. (US 2011/0102340 A1; published May 5, 2011) ("Martin").

Claims 5, 6, 14 and 17 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Furusho, Martin, and Himberg et al. (US 2005/0253816 A1; published Nov. 17, 2005) ("Himberg").

Claims 11–13, 18, and 19 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Furusho, Martin, and Custy (US 7,245,292 B1; issued July 17, 2007).

Claim 20 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Furusho, Martin, and Soh et al. ("US 2009/0122797 A1; published May 29, 2008) ("Soh").

Claims 23 and 24 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Furusho, Martin, and Schroeder (US 2007/0024593 A1; published Feb. 1, 2007).

Claims 25 and 26 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Furusho, Martin, Schroeder, and Custy.

ANALYSIS

Dispositive Issue: Did the Examiner err in finding the combination of Furusho and Martin teaches or suggests "being individually configurable to combine the haptic signal at one or more of a plurality of selectable regions to provide the localized haptic response," as recited in independent claim 1 and commensurately recited in independent claims 15 and 22?

Appellant argues the Examiner has not identified any disclosure in Furusho or Martin as teaching the disputed limitation. Appeal. Br. 6–7. Appellant further argues neither reference teaches or suggests combining a signal. Appeal Br. 7. Specifically, Appellant argues the vibration used as a haptic response in Furusho is generated by an actuator at the location where it is needed, so Furusho provides no opportunity for the signal to be combined. Appeal Br. 7 (citing Furusho Figs. 3 and 6, ¶ 51). Appellant argues Martin discloses transmitting tactile feedback from a single actuator to separate buttons using separate switches, and the signal to be delivered to

the buttons is separated through the switches, not combined. Appeal Br. 7 (citing Martin ¶¶ 49–52, Fig. 4).

The Examiner finds Furusho teaches that a plurality of actuators may be driven, which would pass haptic vibration signals from the second surface 11 to the first surface 7 "at a plurality of selectable regions for the haptic response corresponding to plural input areas directly above the respective actuators 17." Ans. 10. Appellant responds that "even if a plurality of actuators are driven, Furusho contains no disclosure at all related to providing a *combined haptic signal*." Reply Br. 3. Appellant contends each driven actuator in Furusho provides haptic feedback to the area on the touch panel directly above it, so "[i]f a plurality of actuators are driven, all of the areas above the plurality of actuators may be provided with haptic feedback." Reply Br. 3.

The Examiner finds Martin uses nodes 19 to transfer haptic responses from second surface 62 to keys 10. Ans. 10. The Examiner finds that nodes 19 are individually configurable to combine the haptic signal at plural selectable regions to provide localized output in that the vibration of second surface 62 provides a combined haptic effect at plural key locations 10 since the whole plate vibrates or, alternatively, if plural nodes 19 are individually activated, pressing plural keys simultaneously would have provided a combined haptic output at the plural regions corresponding to the activated keys. Ans. 10. Appellant replies "the Answer's explanation does not match the operation of Martin" because "individual keys 10 receive haptic feedback via switches 19" so "there is no combined haptic effect being experience at each key." Reply Br. 4.

We agree with Appellant. Furusho teaches a vibration program stored in memory to drive a preset actuator 17 among a plurality of actuators 17. Furusho ¶ 51. Furusho's actuators 17 are directly below a portion of the touch panel 6a or above a switch 18. *Id.* When a user touches touch panel 6a, coordinate information about the touch panel is obtained, and "current is passed only through an electrode **12** of the actuator **17** to be driven." *Id.* at ¶ 59; *see also id.* at ¶ 51. "The operated portion on the touch panel ***6a*** is locally vibrated by the vibration of the actuator **17**." *Id.* at ¶ 59. Based on the foregoing disclosure, we agree with Appellant that Furusho does not teach or suggest a combined signal; rather, Furusho teaches localized vibration above each actuator.

Martin describes a switch 19a in communication with a button 10i. Martin ¶ 52. When a user presses key 10i, it applies pressure to switch 19a, which transmits a signal to controller 9. *Id.* Controller 9 transmits a controller output signal to actuator 61, which provides a vibration to metal diaphragm 20. *Id.* Diaphragm 20 vibrates, causing printed circuit board 62 to vibrate, and thus, in turn causing switches 19 to vibrate. *Id.* Because switch 19a is in communication with button 10i, switch 19a then causes button 10i to vibrate. *Id.* Based on the foregoing disclosure, we agree with Appellant that Martin teaches transmitting vibration to separate buttons using separate switches, rather than through a combined signal.

The Examiner has not made sufficient findings that Furusho and Martin, or the combination of the two references teaches or suggests the disputed limitation. Because we agree with at least one of Appellant's arguments, we need not address Appellant's remaining arguments. We, therefore, do not sustain the Examiner's 35 U.S.C. § 103(a) rejection of

independent claims 1, 15, and 22, and for the same reasons, dependent claims 2–14, 16–21, and 23–26..

DECISION

The Examiner's 35 U.S.C. § 103(a) rejection of claims 1–26 is reversed.

REVERSED