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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* GORDON F. TAYLOR and  
THOMAS J. REBESCHI<sup>1</sup>

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Appeal 2016-001484  
Application 14/205,781  
Technology Center 2600

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Before MICHAEL J. STRAUSS, MICHAEL M. BARRY, and  
PHILLIP A. BENNETT, *Administrative Patent Judges*.

BENNETT, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellants appeal under 35 U.S.C. § 134(a) from the Examiner's final rejection of claims 1–8, which are all of the claims pending in this application. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

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<sup>1</sup> Appellants' Brief (App. Br.) identifies the real party in interest as 3M Company (formerly known as Minnesota Mining and Manufacturing Company) of St. Paul, Minnesota and its affiliate 3M Innovative Properties Company of St. Paul, Minnesota. App. Br. 2.

### CLAIMED SUBJECT MATTER

The claims are directed to a modular connector for a touch sensitive device. Claim 1, reproduced below, is illustrative of the claimed subject matter:

1. A modular connector for use with a touch sensor, comprising:
  - a substrate;
  - a integrated circuit disposed on the substrate;
  - a plurality of first terminal areas disposed on the substrate and individually addressable by the integrated circuit; and
  - a second terminal area disposed on the substrate and communicatively coupled to the integrated circuit, such that when the modular connector is used with a touch sensor, the plurality of first terminal areas make electrical connection with a plurality of electrodes of the touch sensor, and the second terminal area makes electrical connection with a terminal area of another modular connector used with the touch sensor.

App. Br. 7 (Claims Appendix).

### REJECTIONS

Claims 1, 2, 5, 7, and 8 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Nakamura (JP2000-267065, published Sept. 29, 2000).

Claims 3, 4, and 6 stand rejected under 35 U.S.C. § 103(a) as being obvious over Nakamura and Hayton (US 2011/0095999 A1, published Apr. 28, 2011).

### ISSUE FOR DECISION

Does Nakamura disclose a “modular connector” under the broadest reasonable interpretation of that term?

ANALYSIS

*Examiner's Findings and Appellants' Arguments*

The Examiner finally rejects the independent claims as anticipated by Nakamura, finding Nakamura discloses the claimed modular connector. Final Act. 2–3. In making these findings, the Examiner construed the term “modular” according to its ordinary meaning of “[e]mploying or involving a module or modules as the basis of design or construction.” Final Act. 7–8 (citing Oxford Dictionaries). Applying that construction, the Examiner finds Nakamura’s four different groups of sampling switches 23, buffers 24 and timing circuits 25 each form a modular connector for use with a touch sensor, as shown in Figure 1. Final Act. 3–5, 7–8.

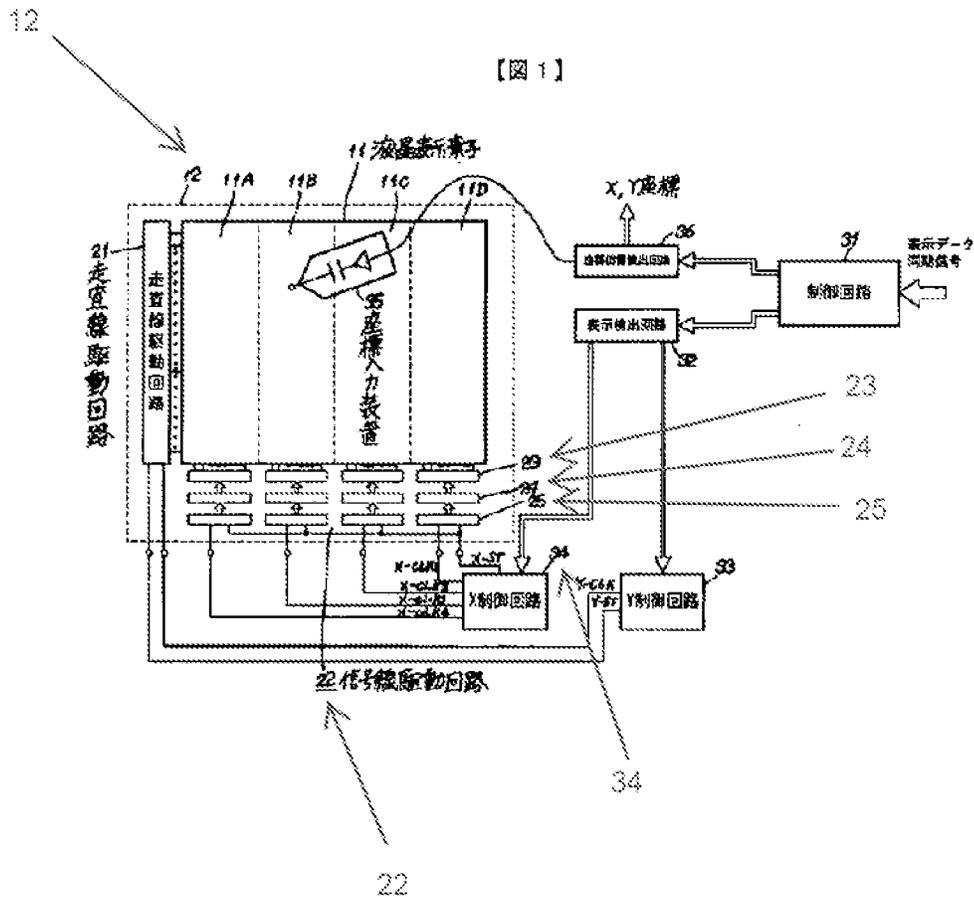


Figure 1 of Nakamura shows a liquid crystal display device.

Appellants argue the Examiner errs in finding Nakamura discloses a “modular connector” because the Examiner fails to accord patentable weight to the term “modular.” App. Br. 4.<sup>2</sup> Appellants contend one of ordinary skill in the art would not consider the elements 23, 24, and 25 shown in Nakamura to form a modular connector. App. Br. 4–5. Appellants further contend the Examiner failed to define “module,” and provided only a circular definition of “modular.” App. Br. 5. Appellants offer a dictionary definition for the term module from the American Heritage Dictionary: “a self-contained assembly of electronic components and circuitry, such as a stage in a computer, that is installed as a unit.” App. Br. 4. Applying this construction, Appellants argue Nakamura is deficient because the driving circuit 22 does not include a plurality of modules, each installed as a unit. App. Br. 5. Appellants further add Nakamura’s elements 23, 24, and 25 cannot be modules because they are formed on the same substrate. App. Br. 5.

The Examiner provides a competing dictionary definition in the Examiner’s Answer and adds additional explanation:

Therefore, here the word “*module*” is defined as “*a set of standardized parts or independent units that can be used to construct a more complex structure.*”

...

*Examiner is interpreting each set of sampling switch 23, buffer 24 and timing circuit 25 connected to one of the sections 11A–11D as a standardized part, and the set of these standardized parts can be used to construct a more complex structure that is driving circuit 22 of fig. 1.*

Ans. 4.

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<sup>2</sup> Appellants present the same arguments for all claims, so all pending claims stand or fall together.

In the Reply Brief, Appellants argue the Examiner's definition should not be adopted because it is not consistent with the standalone modular connector shown in Figure 5 of the Specification. Reply Br. 2. Appellants further argue that, under the Examiner's proposed definition, Nakamura still does not disclose any modular connector. *Id.* According to Appellants, the Examiner has failed to demonstrate each grouping of sampling switches 23, buffers 24 and timing circuits 25 is an independent unit or standardized part, so the groupings cannot be considered modular connectors.

*Broadest Reasonable Interpretation*

This appeal turns on the broadest reasonable interpretation of the phrase "modular connector." Appellants' Specification does not provide a lexicographic definition "module" or "modular connector." Accordingly, it is appropriate in this instance to consult dictionary definitions for guidance in determining the ordinary and customary meaning of the claim term as viewed by a person of ordinary skill in the art. *Comaper Corp. v. Antec, Inc.*, 596 F.3d 1343, 1348 (Fed. Cir. 2010). Here, we have a case of competing definitions respectively offered by Appellants and the Examiner. The Federal Circuit has held that "[i]f more than one dictionary definition is consistent with the use of the words in the intrinsic record, the claim terms may be construed to encompass all consistent meanings." *Bilstad v. Wakalopoulos*, 386 F.3d 1116, 1122 (Fed. Cir. 2004) (citations omitted).

Appellants contend that the Examiner's proffered definition is inconsistent with the standalone modular connector shown schematically in Figure 5 of the Specification. We disagree, and find both offered dictionary definitions to be consistent with the specification. The Examiner's definition of "a set of standardized parts or independent units that can be used to construct a more complex structure" encompasses the standalone

modular connector shown in Figure 5 because the modular connector in Figure 5 is both a standardized part and an independent unit used to construct a more complex structure, namely, a platform that allows individual addressing of electrodes in a display.

*Nakamura Discloses a Modular Connector*

Having determined that a “module” includes “a set of standardized parts or independent units that can be used to construct a more complex structure,” we agree with the Examiner’s finding Nakamura teaches the recited “modular connector.” We are not persuaded by Appellants’ contention that Nakamura’s groupings of a sampling switch 23, a buffer 24, and a timing circuit 25 is neither a standardized part nor an independent unit. Reply Br. 2. Each of the four groupings has the same three parts: a sampling switch, a buffer, and a timing circuit. Because each grouping has the same set of parts, they can be considered to be “standardized parts.” We are also unpersuaded by Appellants’ argument that, because the four groupings are formed on the same substrate, they cannot be considered modular connectors. This argument is contradicted by Appellants’ own Specification which discloses “[i]n one embodiment, the modular connectors are on a single, continuous substrate, for example a single piece of PCB that was custom created for pairing with a particular number of touch panel conductors.” Spec. 9, ll. 4–6.

In sum, we conclude the broadest reasonable interpretation of “module” is encompassed by both dictionary definitions offered in this appeal. We are not persuaded the Examiner has erred in finding Nakamura discloses a “modular connector” under this broadest reasonable interpretation. Accordingly, we sustain the Examiner’s rejections.

Appeal 2016-001484  
Application 14/205,781

DECISION

The Examiner's rejection of claims 1, 2, 5, 7, and 8 under 35 U.S.C. § 102(b) is affirmed.

The Examiner's rejection of claims 3, 4, and 6 under 35 U.S.C. § 103(a) 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).

AFFIRMED