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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* ALEKSANDAR ODOROVIC and  
ANDRIJA BOSNJAKOVIC<sup>1</sup>

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Appeal 2018-004010  
Application 13/682,561  
Technology Center 2400

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Before MICHAEL J. STRAUSS, SHARON FENICK, and  
MICHAEL M. BARRY, *Administrative Patent Judges*.

STRAUSS, *Administrative Patent Judge*.

DECISION ON APPEAL

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<sup>1</sup> According to Appellants, the real party in interest is Nvidia Corporation.  
*See App. Br. 1.*

## STATEMENT OF THE CASE

Appellants appeal under 35 U.S.C. § 134(a) from a rejection of claims 1–22. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.<sup>2</sup>

## THE INVENTION

The invention relates to transmitting vector data comprising state data of the current states of user input devices over a network to a host device , and to determine at the host device a current input state by comparing current to previous vector data. Spec., ¶ 4. Claim 1, reproduced below, is illustrative of the claimed subject matter:

1. A method of remote network communication, said method comprising:

a server receiving a current vector data from a remote device over a communication network, said current vector data comprising a composite state representation of state for a plurality of user input devices of said remote device;

said server determining user input by performing a comparison of said current vector data to a previously known vector data, wherein said previously known vector data comprises a composite state representation of a prior state for said plurality of user input devices and wherein said previously known vector data is stored on said server; and

using an application, said server rendering a display output responsive to said user input;

said server transmitting said display output to said communication network for receipt by said remote device.

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<sup>2</sup> We refer to the Specification, filed November 20, 2012 (“Spec.”); the Final Office Action, mailed April 20, 2017 (“Final Act.”); the Appeal Brief, filed October 19, 2017 (“Br.”); and the Examiner’s Answer, mailed December 13, 2017 (“Ans.”).

## REFERENCES

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

Matsunaga	US 2004/0167893 A1	Aug. 26, 2004
Tjew	US 2013/0111019 A1	May 2, 2013

## REJECTION

The Examiner rejected claims 1–22 under 35 U.S.C. § 103 as being unpatentable over Tjew and Matsunaga.

## ANALYSIS

Appellants' contentions are unpersuasive of reversible Examiner error. We adopt as our own (1) the findings and reasons set forth by the Examiner in the action from which this appeal is taken (Final Act. 2–5) and (2) the reasons set forth by the Examiner in the Examiner's Answer in response to Appellants' Appeal Brief (Ans. 3–5) and concur with the conclusions reached by the Examiner. We highlight the following for emphasis.

Appellants contend Tjew only tracks messages received at a server from one or more clients to detect patterns or sequences of communications indicative of abnormal client behavior but that receipt of such messages does not teach or suggest receipt of the claimed current vector. Br. 12. In particular, Appellants argue Tjew's messages do not comprise a composite state representation of the state for a plurality of user input devices including continuous data. *Id.* at 12–13. Appellants further argue Tjew fails to teach or suggest determining user input by comparing the current vector data with previously known vector data wherein the previously known vector data likewise comprises a state representation of a prior state for the plurality of

user input devices. *Id.* at 13. Appellants also argue Tjew’s client devices are computer systems executing an interactive application, not input devices and, therefore, Tjew fails to determine user input by performing a comparison of current and previous vector data. *Id.* at 16–17.

The Examiner responds, finding the composite state representation constituting the disputed vector data requirement is not limited to a specific type of data. Ans. 3–4. According to the Examiner, “the claimed ‘composite state representation of the plurality of input devices’ would be read more broadly to include any ‘state’ data of the input device (such as PC, game console, mobile device) including state data described in paragraph 0038 of Tjew.” *Id.* at 4. The Examiner further disagrees Tjew fails to teach receiving input data from input devices, directing attention to paragraphs 21, 23, and 36 of Tjew disclosing a user interface and a variety of devices, such as game consoles, mobile computing devices, computers, smart phones, and tables understood to include “one or more integrated input component or input interface (e.g., PC keyboard & mouse, game console joystick, mobile phone touch screen, etc.) to receive user input data.” *Id.* The Examiner addresses Appellants’ contention that Tjew fails to perform a comparison of current and previous vector data, directing attention to Tjew’s disclosure of determining whether user input or behavior is normal by performing a comparison. *Id.* (citing Tjew ¶ 45).

Appellants’ contentions are unpersuasive of Examiner error. Appellants fail to provide sufficient evidence or argument to persuade us that the vector data of claim 1 should be construed more narrowly than concluded by the Examiner. Instead, under a broad but reasonable interpretation, we agree with the Examiner in finding Tjew’s state data

teaches or suggests the disputed vector data. We further agree with the Examiner in finding Tjew's disclosure of a user interface and a variety of user devices would have been understood to include mechanisms for receiving user input and, therefore, would have taught or suggested to one skilled in the art the disputed user input devices. We further agree Tjew's comparison (by detect unit 17) of a constructed sequence or state machine and recorded sequence or state machine messages, teaches or suggests the disputed comparison of current and previous vector data. *See* Tjew ¶ 45. Accordingly, we sustain the rejection of independent claim 1 and, for the same reasons, the rejection of independent claims 8 and 16 together with the rejection of dependent claims 3–7, 9–15, and 17–22 which are not argued separately with particularity.

In connection with dependent claim 2 the Examiner finds “Matsunaga teaches determining/reading the current data and previously known data, and replacing the previously known data with the current data.” Final Act. 3 citing Matsunaga ¶¶ 165–66. The Examiner further finds “[i]t would have been obvious to one skilled in the art to recognize that some data replacement would have not been taking place if current data is the same as previously known data.” *Id.*

Appellants contend Matsunaga discloses only “calculating a certainty where the input data occurs using the stochastic model by reading the parameters of the stochastic model from the parameter storage unit”, not the limitations of dependent claim 2. Br. 20. The Examiner responds, explaining Tjew discloses most of the argued limitations including a composite state representation of state for a plurality of user input devices and determining difference between a current and a previously known vector

data while Matsunaga discloses updating the probabilistic engine by replacing previously known data with current data when the data differs. Ans. 4–5. The Examiner further finds, although Matsunaga does not explicitly disclose maintaining the previously known data if there is no change in the data, “it would have been obvious to one skilled in the art to recognize such non-updating data function because it would have enabled preserving system resource by not performing unnecessary data update operation.” Ans. 5.

Appellants’ contention is unpersuasive because it fails to address the Examiner’s findings and is an improper attack on the references individually where the rejection is based on the combination of references. *See In re Keller*, 642 F.2d 413, 426 (CCPA 1981); *In re Merck & Co., Inc.*, 800 F.2d 1091, 1097 (Fed. Cir. 1986). In particular, the argued deficiencies of Matsunaga relate to limitations for which the Examiner relies on Tjew including the argued composite state representation of state for a plurality of user input devices of said remote device and determination of a difference between previously known and current vector data. Accordingly we agree with the Examiner in finding the combination of Tjew and Matsunaga teaches or suggests the argued limitations and we sustain the rejection of dependent claim 2.

#### DECISION

We affirm the Examiner’s decision to reject claims 1–22 under 35 U.S.C. § 103(a).

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No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv). *See* 37 C.F.R. § 41.50(f).

AFFIRMED