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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* MATTHEW M. SYMMONDS

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Appeal 2019-004194  
Application 13/584,084  
Technology Center 3600

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Before BRYAN F. MOORE, LINZY T. McCARTNEY,  
SCOTT B. HOWARD, *Administrative Patent Judges*.

McCARTNEY, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant<sup>1</sup> seeks review under 35 U.S.C. § 134(a) of the Examiner's non-final rejection of claims 1, 4, 6, 8–12, 14–16, 18, 19, 21–23, and 25–29. We have jurisdiction under 35 U.S.C. § 6(b).

We reverse.

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<sup>1</sup> Appellant identifies the real party in interest as The Boeing Company. Appeal Brief 2, filed February 6, 2019 (Appeal Br.).

## BACKGROUND

This patent application concerns “developing a product in a product development environment that has a virtual product online world.”

Specification ¶ 1, filed August 13, 2012. Claim 1 illustrates the claimed subject matter:

1. A product development environment comprising:

a computer system comprising an integration hub comprising:

a virtual product online world manager configured to manage elements for a product under development in a virtual product online world on the computer system, wherein a number of organizations develop the elements within the virtual product online world on the computer system by accessing the computer system via a network such that a number of product development systems develop the elements within the virtual product online world on the computer system, and wherein the elements are three-dimensional virtual representations of physical objects;

a product structure manager configured to manage a hierarchy having a plurality of levels in which the elements for the product are distributed, wherein the hierarchy identifies where each element in the elements for the product is located in the product with respect to other elements in the elements for the product and elements on a lower level of the hierarchy that are combined to form an assembly element on a higher level of the hierarchy;

a transformer configured to exchange the elements with the number of product development systems developing the elements over the network and transform an element in the elements received in a foreign file format from a product development system in the number of product development systems into a master file format used in the virtual product online world on the computer system, wherein the transformer is configured to:

receive a request from a first product development system operated by a first organization to place the

element into the virtual product online world on the computer system,

determine whether the element is in the master file format or in a first foreign file format,

transform the element from the first foreign file format into the master file format in response to a determination that the element is in the first foreign file format,

place the element in the master file format into the virtual product online world,

receive a request from a second product development system operated by a second organization to access the element in the virtual product online world,

determine whether a format used by the second product development system is the master file format or a second foreign file format,

transform the element from the master file format into the second foreign file format and send the element in the second foreign file format to the second product development system in response to a determination that the format used by the second product development system is the second foreign file format, and

send the element in the master file format to the second product development system in response to a determination that the format used by the second product development system is the master file format; and

a security manager configured to operate within the virtual product online world to manage information in the elements for the development of the elements within the virtual product online world based on a security policy, wherein the security manager implements rules to handle sharing of information associated with the elements such that clearance to access the assembly element on the higher level of the hierarchy is required to access the elements on the lower level of the hierarchy that are combined to form the assembly element, and wherein the

elements include a security component that identifies security requirements for the elements; and

a manufacturing system communicably coupled to the computer system and configured to receive the elements in the master file format and to create physical forms of the elements.

Appeal Br. 31–33.

### REJECTIONS

Claims	35 U.S.C. §	References/Basis
1, 4, 6, 8–12, 14–16, 18, 19, 21–23, 25, 28, 29 <sup>2</sup>	103(a)	Markvoort, <sup>3</sup> Thackston, <sup>4</sup> De Biswas <sup>5</sup>
26, 27	103(a)	Markvoort, Thackston, De Biswas, Bhogal <sup>6</sup>

### DISCUSSION

Claim 1 recites “wherein the elements include a security component that identifies security requirements for the elements.” Appeal Br. 33. The Examiner found that Thackston teaches this limitation because Thackston allegedly teaches that part design model and project specifications (“the elements”) include data for determining whether to grant access to the model and specifications (“a security component”). *See* Examiner’s Answer 9–10, mailed March 8, 2019; *see also* Non-Final Act. 9–10. Appellant contends that the Examiner erred because Thackston teaches storing the part design

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<sup>2</sup> Although the heading of this rejection does not include claims 14–16, 18, and 19, the accompanying analysis makes clear that these claims also stand rejected over Markvoort, Thackston, and De Biswas. *See* Non-Final Action 3–17, mailed June 29, 2018 (Non-Final Act.).

<sup>3</sup> Markvoort et al. (US 2007/0061154 A1; March 15, 2007).

<sup>4</sup> Thackston (US 6,295,513 B1; September 25, 2001).

<sup>5</sup> De Biswas (US 2013/0144566 A1; June 6, 2013).

<sup>6</sup> Bhogal et al. (US 2007/0079117 A1; April 5, 2007).

model and project specifications separate from the access data. *See* Appeal Br. 20–21.

We agree with Appellant. Thackston teaches storing access data in stored design and analysis access permission data module 860 and storing part design model and project specification data in separate modules such as manufacturing standards and specifications data module 850, stored baseline part design model data module 865, and stored working copy part design model data module 892. *See, e.g.*, Thackston 14:31–33, 15:8–51, 16:34–36, Fig 8, items 850, 860, 865, 892. The Examiner did not conclude that it would have been obvious to modify Thackston’s system so that the part design model and project specifications include the disclosed access data, let alone provide a motivation for doing so. On this record, we therefore do not sustain the Examiner’s rejection of claim 1 and claims 4, 6, 8–11, 22, 23, and 25–29, which depend from claim 1. Because the Examiner’s rejection of independent claims 12, 16, and 19 has a similar deficiency, we also do not sustain the Examiner’s rejection of these claims and their respective dependent claims, claims 14, 15, 18, and 21.

CONCLUSION

The following table summarizes our decision for claims 1, 4, 6, 8–12, 14–16, 18, 19, 21–23, and 25–29, the claims before us on appeal:

<b>Claims Rejected</b>	<b>35 U.S.C. §</b>	<b>References/Basis</b>	<b>Affirmed</b>	<b>Reversed</b>
1, 4, 6, 8–12, 14–16, 18, 19, 21–23, 25, 28, 29	103(a)	Markvoort, Thackston, De Biswas		1, 4, 6, 8–12, 14–16, 18, 19, 21–23, 25, 28, 29
26, 27	103(a)	Markvoort, Thackston, De Biswas, Bhogal		26, 27
<b>Overall Outcome</b>				1, 4, 6, 8–12, 14–16, 18, 19, 21–23, 25–29

REVERSED