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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* WILLIAM E. HALL, GUERNEY D. H. HUNT,  
PAUL A. KARGER, MARK F. MERGEN, DAVID R. SAFFORD,  
and DAVID C. TOLL

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Appeal 2019-004397  
Application 12/245,964  
Technology Center 3600

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Before ST. JOHN COURTENAY III, LARRY J. HUME and  
PHILLIP A. BENNETT, *Administrative Patent Judges*.

COURTENAY, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant<sup>1</sup> appeals under 35 U.S.C. § 134(a) from a Non-Final rejection of claims 1–22. We have jurisdiction over the pending claims under 35 U.S.C. § 6(b).

We reverse.

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<sup>1</sup> We use the word “Appellant” to refer to “applicant” as defined in 37 C.F.R. § 1.42(a). According to Appellant, the real party in interest is International Business Machines Corporation. *See* Appeal Br. 3.

## STATEMENT OF THE CASE

### *Introduction*

An embodiment of Appellant's invention relates to "Hardware Based Mandatory Access Control." Title.

### *Rejection*

Claims 1–22 are rejected under pre-AIA 35 U.S.C. § 103(a) as being obvious over the combined teachings and suggestions of Ginter et al. (US 2003/0191719 A1; pub. Oct. 9, 2003) ("Ginter") and Pedersen et al. (US 2006/0116966 A1; pub. June 1, 2006) ("Pedersen"). *See* Non-Final Act. 3.

### *Illustrative Claim 1*

1. A method, in a data processing system comprising a processor, for performing hardware based access control, comprising:  
*associating, in hardware of the data processing system, an instruction access policy label with an instruction;*  
associating, in hardware of the data processing system, an operand access policy label with data in the data processing system;  
executing, by hardware of the processor, the instruction;  
passing, by one or more hardware functional units of the processor, the instruction access policy label along with the instruction through the one or more hardware functional units of the processor;  
passing, by the one or more hardware functional units of the processor, the operand access policy label along with the data through the one or more hardware functional units of the processor; and  
controlling, by one or more hardware implemented policy engines associated with the one or more hardware functional units of the processor, access by the instruction to the data, during the execution of the instruction by the hardware of the processor, based on the

instruction access policy label and the operand access policy label, wherein controlling access by the instruction to the data comprises applying, to the execution of the instruction, access permissions that govern the execution of the instruction on the data based on the instruction access policy label and the operand access policy label.

Claims App.; Appeal Br. 29 (Emphasis added regarding the disputed dispositive limitations under 35 U.S.C. § 103(a)).

### ANALYSIS

We have considered all of Appellant's arguments and any evidence presented. We highlight *infra* specific arguments and evidence we find to be dispositive.

#### *Rejection of Independent Claims 1 and 12 under § 103(a)*

**Issue:** Under 35 U.S.C. § 103(a), we focus our analysis on the following argued limitations from claim 1 that we find are dispositive regarding the obviousness rejection of independent claims 1 and 12.

We decide the question of whether the Examiner erred by finding that the cited references teach or at least suggest the disputed limitations of independent claim 1, as shown in emphasis below:

1. A method, in a data processing system comprising a processor, for performing hardware based access control, comprising:

...

*associating, in hardware of the data processing system, an instruction access policy label with an instruction[,]*

within the meaning of independent claim 1? <sup>2</sup>

Appellant argues:

The Office Action fails to clearly communicate or articulate any findings or reasons why the claimed invention is allegedly obvious over the cited prior art. To the contrary, the rejection is merely a reiteration of the claimed features with the *same parenthetical listing of the same 28 paragraphs from Ginter for each feature of the claim*, other than those that the Office Action admits are not taught by Ginter but alleges are taught by Pedersen. The features that the Office Action alleges are taught by Pedersen are again merely reiterated in the rejection followed by a reference to paragraph [0073] of Pedersen. There is no analysis or explanation of any of these paragraphs that would clearly communicate or articulate to Appellants how the teachings of these paragraphs somehow are being interpreted by the Examiner as being allegedly the same as the features they are cited against.

Appeal Br. 6.

We agree with Appellant's contentions and find the Examiner has failed to set forth a prima facie case in rejecting independent claims 1 and 12 in the Non-Final Action.<sup>3</sup> *See* Non-Final Act. 3–4. The Federal Circuit has

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<sup>2</sup> We give the contested claim limitations the broadest reasonable interpretation (“BRI”) consistent with the Specification. *See In re Morris*, 127 F.3d 1048, 1054 (Fed. Cir. 1997).

<sup>3</sup> [A]ll that is required of the office to meet its prima facie burden of production is to set forth the statutory basis of the rejection and the reference or references relied upon in a sufficiently articulate and informative manner as to meet the notice requirement of [35 U.S.C.] § 132. As the statute itself instructs, the examiner must “notify the applicant,” “stating the reasons for such rejection,” “together with

held, “the prima facie case is merely a procedural device that enables an appropriate shift of the burden of production.” *Hyatt v. Dudas*, 492 F.3d 1365, 1369 (Fed. Cir. 2007). This burden is met by “adequately explain[ing] the shortcomings it perceives so that the applicant is properly notified and able to respond.” *Id.* at 1370. It is only “when a rejection is so uninformative that it prevents the applicant from recognizing and seeking to counter the grounds for rejection” that the prima facie burden has not been met and the rejection violates the minimal requirements of 35 U.S.C. § 132. *Chester v. Miller*, 906 F.2d 1574, 1578 (Fed. Cir. 1990).

Here, we find the rejection is so uninformative that it prevents the Appellant from recognizing and seeking to counter the grounds of rejection. In particular, the Examiner supports the rejection with *identical* lists of paragraph citations for *different* claim limitations, without providing any explanation or **specific** mapping as to the best teaching found. *See* Non-Final Act. 3–4.

As persuasively argued by Appellant (Appeal Br. 6), “the rejection is merely a reiteration of the claimed features with the *same parenthetical listing of the same 28 paragraphs from Ginter for each feature of the claim.*”

For clarity, we reproduce pages 3 and 4 of the Examiner’s rejection of claims 1 and 12 below:

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such information and references as may be useful in judging the propriety of continuing prosecution of his application.”

*In re Jung*, 637 F.3d 1356, 1363 (Fed. Cir. 2011).

**As to claims 1 and 12:**

Ginter teaches substantially as claimed:

associating, in hardware of the data processing system, an instruction access policy label with an instruction ([0045], [0141], [0160], [0162], [0197], [0245]-[0246], [0415], [0424], [0461], [0514], [0536], [0701], [0740], [0984], [1056], [1283], [1300], [1310], [1563], [2179], [2343], [2346], [2370], [2374], [2466], [2512], [2517], Figure 1);

associating, in hardware of the data processing system, an operand access policy label with data in the data processing system ([0045], [0141], [0160], [0162], [0197], [0245]-[0246], [0415], [0424], [0461], [0514], [0536], [0701], [0740], [0984], [1056], [1283], [1300], [1310], [1563], [2179], [2343], [2346], [2370], [2374], [2466], [2512], [2517], Figure 1);

executing, by hardware of the processor, the instruction;

passing, by one or more hardware functional units of the processor, the instruction access policy label along with the instruction through the one or more hardware functional units of the processor ([0045], [0141], [0160], [0162], [0197], [0245]-[0246], [0415], [0424], [0461], [0514], [0536], [0701], [0740], [0984], [1056], [1283], [1300], [1310], [1563], [2179], [2343], [2346], [2370], [2374], [2466], [2512], [2517], Figure 1);

Non-Final Act. 3.

passing, by the one or more hardware functional units of the processor, the operand access policy label along with the data through the one or more hardware functional units of the processor; and ([0045], [0141], [0160], [0162], [0197], [0245]-[0246], [0415], [0424], [0461], [0514], [0536], [0701], [0740], [0984], [1056], [1283], [1300], [1310], [1563], [2179], [2343], [2346], [2370], [2374], [2466], [2512], [2517], Figure 1);

Non-Final Act. 4.

We find such identical mappings of different claim limitations violates the mapping rule: “When a reference is complex or shows or describes inventions other than that claimed by the applicant, *the particular part relied on must be designated as nearly as practicable. The pertinence of each reference, if not apparent, must be clearly explained and each rejected claim specified.*” 37 C.F.R. § 1.104(c)(2) (emphasis added).

Further, regarding the one-to-many *identical mappings* for *different* claim limitations, we note in an *ex parte* appeal, the Board “is basically a board of review — we review . . . rejections made by patent examiners.” *Ex parte Gambogi*, 62 USPQ2d 1209, 1211 (BPAI 2001). “The review authorized by 35 U.S.C. Section 134 is not a process whereby the examiner . . . invite[s] the [B]oard to examine the application and resolve patentability in the first instance.” *Ex parte Braeken*, 54 USPQ2d 1110, 1112 (BPAI 1999).

The Examiner need only map each claim limitation to the *best teaching* found in the particular reference. We agree with Appellant that the form and substance of the rejection in the Non-Final Action is deficient and thus fails to establish a *prima facie* case. A list of 28 paragraphs for the Board to search through is not specific as to the best teaching found, and therefore fails to provide: (1) sufficient evidence to support the rejection before the Board, and (2) sufficient notice to Appellant *which is required by due process* and the additional requirements of 35 U.S.C. § 132(a).

To the extent the Examiner attempts to narrow the corresponding teachings found in the references in the “Response to Arguments” section of the Answer, Appellant argues, in response to the Examiner’s additional findings in the Answer (Ans. 5–22, Second Ans. 4–21):

With regard to the phrase ‘instruction access policy label’, the Examiner references paragraphs [0322], [0757], [0762], [0984], [1055], [1163], [1170], and Figures 15a, 17, and 26, without explaining what in any of these figures is allegedly an instruction access policy label.

Reply Br. 5–6.

The Examiner finds Ginter’s PERC teaches the limitation “instruction access policy label.” Second Ans. 5 (mailed Mar. 18, 2019).

Appellant further argues, “Notably, nothing in Figure 26 or the cited paragraphs mentions anything about ‘associating, *in hardware of the data processing system, an instruction access policy label with an instruction*’ (emphasis added).” Reply Br. 6.

Appellant further contends,

The PERC in Ginter is a complex data structure for specifying to a software VDE the rights controls of objects. Nowhere in Figure 26 or the description of a PERC is there any teaching or suggestion that the PERC is an instruction access policy label that is associated, *in hardware of a data processing system, with an instruction*. To the contrary, the PERC in Ginter is associated with an object, not an instruction, and is not associated with the object *in the hardware of the data processing system*.

Reply Br. 7.

Appellant additionally urges:

[A]n “instruction” is a single action statement in a computer language. An instruction is not “broadly” interpreted to be any user’s function as alleged by the Examiner but rather is a computer language action statement that causes the hardware of the computing device to perform the corresponding action. Hence, the Examiner’s allegation that the “instruction” in the present claims may be “the reception of a user’s request to perform a function on content/media/object” is without merit and contrary to the accepted meaning of the term “instruction” as it is generally known in the computer arts.

Reply Br. 9.

We agree with Appellant that the Examiner’s claim construction of the disputed limitation is overly broad and does not reasonably encompass Ginter’s PERC as teaching “associating *in [the] hardware of the data*

*processing system, an instruction access policy label with an instruction;*”  
Claim 1 (emphasis added).

Our reviewing court guides: “While the Board must give the terms their broadest reasonable construction, the construction cannot be divorced from the specification and the record evidence.” *In re Man Machine Interface Technologies LLC*, 822 F.3d 1282, 1286 (Fed. Cir. 2016) (citing *In re NTP, Inc.*, 654 F.3d 1279, 1288 (Fed. Cir. 2011)).

As emphasized by the Federal Circuit in *Smith*:

Even when giving claim terms their broadest reasonable interpretation, the Board cannot construe the claims “so broadly that its constructions are *unreasonable* under general claim construction principles.” *Microsoft Corp. v. Proxyconn, Inc.*, 789 F.3d 1292, 1298 (Fed. Cir. 2015). “[T]he protocol of giving claims their broadest reasonable interpretation . . . does not include giving claims a legally incorrect interpretation” “divorced from the specification and the record evidence.” *Id.* (citations and internal quotation marks omitted); *see PPC Broadband, Inc. v. Corning Optical Commc'ns RF, LLC*, 815 F.3d 747, 751–53 (Fed. Cir. 2016).

...

The correct inquiry in giving a claim term its broadest reasonable interpretation in light of the specification is not whether the specification proscribes or precludes some broad reading of the claim term adopted by the examiner. And it is not simply an interpretation that is not inconsistent with the specification. It is an interpretation that corresponds with what and how the inventor describes his invention in the specification, i.e., an interpretation that is “consistent with the specification.” *In re Morris*, 127 F.3d 1048, 1054 (Fed. Cir. 1997) (citation and internal quotation marks omitted); *see also In re Suitco Surface*, 603 F.3d 1255, 1259–60 (Fed. Cir. 2010).

*In re Smith Int’l, Inc.*, 871 F.3d 1375, 1382–83 (Fed. Cir. 2017).

Applying our reviewing court’s guidance here, we broadly but reasonably interpret the disputed claim language in a manner consistent with Appellant’s Specification. *See* Spec. ¶¶ 35–62. Given the support in the Specification (¶¶ 35–62), we conclude the broadest reasonable interpretation of “*associating, in hardware of the data processing system, an instruction access policy label with an instruction*” (claim 1), that is “consistent with the specification” (*Morris*, 127 F.3d at 1054), means that an instruction access policy label is associated with a computer instruction — not a logical object or data structure/user request — in the hardware of the data processing system. Therefore, we conclude the Examiner’s broader interpretation is overly broad, unreasonable, and inconsistent with the Specification. *See* Ans. 5–6.

For at least the aforementioned reasons, we are persuaded by Appellant’s arguments that the claim 1 limitation “*associating, in hardware of the data processing system an instruction access policy label with an instruction*” is not taught or suggested by the Examiner’s citations to Ginter. Nor has the Examiner shown that the secondary Pedersen reference overcomes the aforementioned deficiencies of Ginter.

On this record, we find a preponderance of the evidence supports Appellant’s arguments for essentially the same reasons articulated in the Briefs. We note remaining independent claim 12 recites the contested limitation of claim 1 in similar form having commensurate scope.

Accordingly, we are constrained on this record to reverse the Examiner’s § 103(a) rejection of all independent claims on appeal.

For the same reasons, we also reverse the Examiner’s rejection of all dependent claims 2–11 and 13–22, and additionally, because the Examiner

(Non-Final Action 5–6) failed to properly accord patentable weight to the disputed “wherein” clause limitations, as recited in particular dependent claims, and argued by Appellant. *See* Appeal Br. 8–9. We direct the Examiner’s attention to MPEP § 2111.04 for specific guidance regarding when “wherein” clauses limit (or do not limit) the scope of the claim. <sup>4</sup>

### CONCLUSION

The Examiner erred in rejecting claims 1–22 as being obvious under 35 U.S.C. § 103.

### DECISION SUMMARY

Claims Rejected	35 U.S.C. §	Reference(s)/ Basis	Affirmed	Reversed
1–22	103(a)	Ginter, Pedersen		1–22

### REVERSED

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<sup>4</sup> As a matter of claim construction of the contested “wherein” clause limitations, MPEP § 2111.04 describes two situations in which the claim scope is not limited *that we conclude are inapplicable in this appeal*:

Claim scope is not limited by [method] claim language that *suggests or makes optional but does not require steps to be performed*, or by [apparatus] claim language that *does not limit a claim to a particular structure*. However, examples of claim language, although not exhaustive, that may raise a question as to the limiting effect of the language in a claim are:

- (A) “adapted to” or “adapted for” clauses;
- (B) “**wherein**” clauses; and
- (C) “whereby” clauses.

MPEP §2111.04 Ninth Ed., Rev. 08-2017, last revised Jan. 2018 (emphasis added).