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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
90/014,560	08/06/2020	6725456	50348.48	3047
179036	7590	10/01/2021	EXAMINER	
Lowenstein & Weatherwax LLP 1880 Century Park East Suite 815 Los Angeles, CA 90067			BASEHOAR, ADAM L	
			ART UNIT	PAPER NUMBER
			3992	
			MAIL DATE	DELIVERY MODE
			10/01/2021	PAPER

**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.



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DALLAS, TX 75219

***EX PARTE* REEXAMINATION COMMUNICATION TRANSMITTAL FORM**

REEXAMINATION CONTROL NO. 90/014,560 .

PATENT UNDER REEXAMINATION 6725456 .

ART UNIT 3992 .

Enclosed is a copy of the latest communication from the United States Patent and Trademark Office in the above identified *ex parte* reexamination proceeding (37 CFR 1.550(f)).

Where this copy is supplied after the reply by requester, 37 CFR 1.535, or the time for filing a reply has passed, no submission on behalf of the *ex parte* reexamination requester will be acknowledged or considered (37 CFR 1.550(g)).

<b>Notice of Intent to Issue Ex Parte Reexamination Certificate</b>	<b>Control No.</b> 90/014,560	<b>Patent Under Reexamination</b> 6725456	
	<b>Examiner</b> Adam L Basehoar	<b>Art Unit</b> 3992	<b>AIA Status</b> No

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

1.  Prosecution on the merits is (or remains) closed in this *ex parte* reexamination proceeding. This proceeding is subject to reopening at the initiative of the Office or upon petition. *Cf.* 37 CFR 1.313(a). A Certificate will be issued in view of
  - (a)  Patent owner's communication(s) filed: 28 June 2021.
  - (b)  Patent owner's failure to file an appropriate timely response to the Office action mailed: \_\_\_\_\_.
  - (c)  Patent owner's failure to timely file an Appeal Brief (37 CFR 41.31).
  - (d)  The decision on appeal by the  Board of Patent Appeals and Interferences  Court dated \_\_\_\_\_
  - (e)  Other: \_\_\_\_\_.
2. The Reexamination Certificate will indicate the following:
  - (a) Change in the Specification:  Yes  No
  - (b) Change in the Drawing(s):  Yes  No
  - (c) Status of the Claim(s):
    - (1) Patent claim(s) confirmed: 13.
    - (2) Patent claim(s) amended (including dependent on amended claim(s)): \_\_\_\_\_
    - (3) Patent claim(s) canceled: \_\_\_\_\_.
    - (4) Newly presented claim(s) patentable: \_\_\_\_\_.
    - (5) Newly presented canceled claims: \_\_\_\_\_.
    - (6) Patent claim(s)  previously  currently disclaimed: \_\_\_\_\_
    - (7) Patent claim(s) not subject to reexamination: 1-12 and 14-23.
3.  A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on \_\_\_\_\_.
4.  Note the attached statement of reasons for patentability and/or confirmation. Any comments considered necessary by patent owner regarding reasons for patentability and/or confirmation must be submitted promptly to avoid processing delays. Such submission(s) should be labeled: "Comments On Statement of Reasons for Patentability and/or Confirmation."
5.  Note attached NOTICE OF REFERENCES CITED (PTO-892).
6.  Note attached LIST OF REFERENCES CITED (PTO/SB/08 or PTO/SB/08 substitute).
7.  The drawing correction request filed on \_\_\_\_\_ is:  approved  disapproved.
8.  Acknowledgment is made of the priority claim under 35 U.S.C. § 119(a)-(d) or (f).
  - a)  All   b)  Some\*   c)  None of the certified copies have
    - been received.
    - not been received.
    - been filed in Application No. \_\_\_\_\_.
    - been filed in reexamination Control No. \_\_\_\_\_.
    - been received by the International Bureau in PCT Application No. \_\_\_\_\_.

\* Certified copies not received: \_\_\_\_\_.
9.  Note attached Examiner's Amendment.
10.  Note attached Interview Summary (PTO-474).
11.  Other: \_\_\_\_\_.

**All correspondence** relating to this reexamination proceeding should be directed to the **Central Reexamination Unit** at the mail, FAX, or hand-carry addresses given at the end of this Office action.

/ADAM L BASEHOAR/  
Primary Examiner, Art Unit 3992

cc: Requester (if third party requester)

### DETAILED ACTION

1. This Office Action addresses claim 13 of United States Patent Number 6,725,456 B1 (hereafter “Bruno ‘456 patent”), for which it has been determined in the Order Granting *Ex Parte* Reexamination (hereafter “Order”) mailed 09/11/2020 that a substantial new question of patentability (hereafter “SNQ”) was raised in the Request for *Ex Parte* Reexamination filed on 08/06/2020 (hereafter “Request”). A Non-Final Action (hereafter “NFA”) was mailed on 02/26/2021 wherein claim 13 was rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Bettison (Bettison et al., *AUUG Conference Proceedings, Darling Harbour, Sydney, Australia, September 25-27, 1991*, pp. 53-65, “Share and Enjoy SHARE II - A User Administration and Resource Control System for UNIX”, 01/13/1992) in view of Hogan (David Hogan, *The University of Sydney, Technical Report Number 506, ISBN 1 86451 024 2*, pp. 1-23, “Hierarchical Fair Queueing”, 03/12/1997).

The Examiner notes that claims 1-12 and 14-23 of the Bruno ‘456 patent are not subject to this reexamination.

This Office Action is a Notice of Intent to Issue *Ex Parte* Reexamination Certificate (hereafter “NIRC”) and is in response to Patent Owner’s (PO) Response to Non-Final Office Action (hereafter “PO’s Response”) filed on 06/28/2021.

#### *References Discussed in This Action*

- **Bruno Paper** - (Bruno et al., *Proceedings of the USENIX 1998 Annual Technical Conference, New Orleans, Louisiana, June 15-19, 1998*, pp. 235-246, “The Eclipse Operating System: Providing Quality of Service via Reservation Domains”, 11/11/1998)
- **Shimamura** - (U.S. Patent No. 5,682,530, published 10/28/1997)

- **Bettison** - (Bettison et al., *AUUG Conference Proceedings, Darling Harbour, Sydney, Australia, September 25-27, 1991*, pp. 53-65, “Share and Enjoy SHARE II - A User Administration and Resource Control System for UNIX”, 01/13/1992)
- **Hogan** - (David Hogan, *The University of Sydney, Technical Report Number 506, ISBN 1 86451 024 2*, pp. 1-23, “Hierarchical Fair Queueing”, 03/12/1997)

2. PO's Response includes Remarks as well as accompanying Appendices PO-A to PO-M, PO-S to PO-AD, and PO-AG to PO-AI. PO's Response has been entered and made of record. PO's Remarks and the accompanying Appendices have been carefully considered by the Examiner. In view of PO's Response, as discussed below in the Response to Arguments section, original claim 13 is found to be confirmed over the references indicated above.

3. As noted in the Order and the NFA, the Bruno '456 patent term appears to have expired (see: MPEP 2701) on 11/29/2019 after a full twenty year term from the date on which the application for the patent was filed (i.e., application no. 09/450,035, filed on 11/29/1999). Once a patent has expired, no amendment may be proposed for entry in an expired patent other than the cancellation of claims which will be incorporated into the patent by a certificate issued after the expiration of the patent (see: MPEP 2250(III) and 37 C.F.R. 1.530(j)). Additionally, in a reexamination proceeding involving claims of an expired patent, claim construction pursuant to the principle set forth by the court in *Phillips v. AWH Corp.*, 415 F.3d 1303, 1316, 75 USPQ2d 1321, 1329 (Fed. Cir. 2005) (words of a claim “are generally given their ordinary and customary meaning” as understood by a person of ordinary skill in the art in question at the time of the invention) should be applied since the expired claims are not subject to amendment. *See Ex parte*

*Papst-Motoren*, 1 USPQ2d 1655 (Bd. Pat. App. & Inter. 1986). Therefore, as previously noted, the Examiner has granted the Bruno '456 patent claims their "ordinary and customary meaning" pursuant to *Phillips v. AWH Corp* in the instant reexamination.

#### ***Claim Status Summary***

4. The current status of the claims of the Bruno '456 patent in this *Ex Parte* Reexamination proceeding are as follows:

- Claim 13 is confirmed
- Claims 1-12 and 14-23 are not subject to the instant reexamination

#### ***Information Disclosure Statement***

5. Regarding Information Disclosure Statement (IDS) submissions, MPEP 2256 recites the following: "Where patents, publications, and other such items of information are submitted by a party (patent owner or requester) in compliance with the requirements of the rules, the requisite degree of consideration to be given to such information will be normally limited by the degree to which the party filing the information citation has explained the content and relevance of the information. The initials of the examiner placed adjacent to the citations on the form PTO/SB/08A and 08B or its equivalent, without an indication to the contrary in the record, do not signify that the information has been considered by the examiner any further than to the extent noted above."

Accordingly, the IDS submissions filed by Patent Owner on 08/23/2021 and 08/24/2021 have been considered by the Examiner only with the scope required by MPEP 2256, unless otherwise noted.

### ***Response to Arguments***

6. Patent Owner's Remarks/Arguments (see: PO's Response, pp. 7-33) and Appendices PO-A to PO-M, PO-S to PO-AD, and PO-AG to PO-AI have been fully considered and are discussed below with regard to the rejection set forth in the NFA mailed on 02/26/2021. More specifically, the Examiner notes that the Declaration (hereafter "Jones Declaration") under 37 C.F.R. 1.132 of Professor Mark T. Jones, Ph.D., has been fully considered and is also referenced below.

PO's Response successfully rebuts the obviousness rejection of independent claim 13 that relied upon the Bettison and Hogan references. In general, it is noted that not all arguments set forth in PO's Response are agreed upon by the Examiner. However, at least the portions discussed on pages 19-24 of PO's Response and paragraphs 48-56 of the Jones Declaration, which highlight and examine the claimed "minimum amount of resources", are sufficient to overcome the obviousness rejection. Therefore, the Examiner notes that PO's arguments regarding the evidence of prior art availability of the Hogan reference are rendered moot at least in view of PO's persuasive arguments discussed below regarding the combination of Bettison in view of Hogan.

### **The Bettison and Hogan References**

Upon further consideration of the applied references in view of PO's Response, the Examiner agrees that the combination of Bettison in view of Hogan fails to teach or suggest certain limitations of independent claim 13. Specifically, Bettison in view of Hogan fails to teach or suggest, "wherein the resource reservations are organized hierarchically such that each resource reservation r may have at most one parent and one or more siblings and children, and

associated with r is a weight that specifies how r shares the resources of r's parent with r's siblings; and wherein associated with each resource reservation r is a minimum amount of resources that r receives from its parent p, such that the minimum amount of resources associated with p is at least equal to the sum of the minimum amount of resources associated with each of p's children" (emphasis added).

Regarding the Hogan reference, the Examiner agrees that Hogan does not specifically teach or suggest the claimed "minimum amount of resources" associated with a resource reservation r in view of the claimed "weight" which is also associated with said resource reservation r. As noted by PO, independent claim 13, in light of the "ordinary and customary meaning" of the words of the claim, requires two separate and distinct values to be associated with each resource reservation r. The "weight" is a percentage (proportional) value that specifies how a resource reservation r shares the resources of r's parent with r's siblings. The "minimum amount of resources" is a minimum absolute value of resources, expressed in units appropriate to the respective resource, that a resource reservation r receives from its parent p (see: Bruno '456 patent, column 5, line 24 – column 6, line 21).

At best, the Hogan reference appears to teach associating a "weight" with each resource reservation r that specifies how r shares the resources of r's parent with r's siblings (see: NFA, pp. 8-9). However, the Examiner acknowledges that the "minimum amount of resources" cited in Hogan (see: NFA, pp. 10-11) does not appear to be a separate and distinct minimum absolute value of resources. In fact, the calculated "minimum guaranteed bandwidth" of Hogan is directly derived from the associated "weights" and is merely a percentage (proportional) based representation of bandwidth allocation. Therefore, the calculated "minimum guaranteed



bandwidth” of Hogan is similar to the associated “weights” and is not a separate and distinct minimum absolute value of resources as required by the claim.

The Examiner notes that the applied teachings of the Bettison reference are not believed to remedy the deficiencies noted above with regard to the Hogan reference.

#### The Bruno Paper and Shimamura References

A rejection of independent claim 13 under pre-AIA 35 U.S.C. 103(a) as being unpatentable over the Bruno Paper in view of Shimamura was presented (see: Exhibit AA, pp. 1-42) but was not applied (see: NFA, pp. 5-11) in the instant reexamination proceeding. The combination of the Bruno Paper in view of Shimamura is considered deficient for at least a similar rationale as discussed above in light of Bettison in view of Hogan. Specifically, the same portion of the Shimamura reference (e.g., see: Shimamura, column 10, line 27 – column 11, line 47; Figs. 3 and 4) was relied upon to teach the claimed “minimum amount of resources” associated with a resource reservation  $r$  (see: Exhibit AA, pp. 34-35) in view of the claimed “weight” which is also associated with said resource reservation  $r$  (see: Exhibit AA, pp. 31-32). For example, a new child resource management process requiring and requesting a minimum of 10MB of physical memory from its parent does not teach or suggest the two separate and distinct values associated with each resource reservation  $r$  as required by the claim. At best, the Shimamura reference only appears to teach associating a “minimum amount of resources” with each resource reservation  $r$  that specifies the minimum amount of resources that  $r$  might receive from its parent  $p$ . Shimamura does not teach or suggest associating a “weight” that is as a percentage (proportional) value that specifies how a resource reservation  $r$  shares the resources of  $r$ 's parent with  $r$ 's siblings.

The Examiner notes that the cited teachings of the Bruno Paper are not believed to remedy the deficiencies noted above with regard to the Shimamura reference.

***Statement of Reasons for Patentability and/or Confirmation***

7. Claim 13 is confirmed.

The following is an Examiner's statement of reasons for patentability and/or confirmation of claim 13 found in this reexamination proceeding. Claim 13 is confirmed over the art that was explained in the Request and determined to raise a substantial new question of patentability in the Order granting reexamination and over the art that was applied and discussed by the Examiner in the instant reexamination proceeding because of the following:

Regarding independent claim 13, as more specifically discussed above in the Response to Arguments section, the art, alone or in combination, fails to explicitly teach or suggest at least, "wherein the resource reservations are organized hierarchically such that each resource reservation  $r$  may have at most one parent and one or more siblings and children, and associated with  $r$  is a weight that specifies how  $r$  shares the resources of  $r$ 's parent with  $r$ 's siblings; and wherein associated with each resource reservation  $r$  is a minimum amount of resources that  $r$  receives from its parent  $p$ , such that the minimum amount of resources associated with  $p$  is at least equal to the sum of the minimum amount of resources associated with each of  $p$ 's children" (emphasis added) in combination with the other claimed elements of independent claim 13.

Any comments considered necessary by PATENT OWNER regarding the above statement must be submitted promptly to avoid processing delays. Such submission by the patent owner should be labeled: "Comments on Statement of Reasons for Patentability and/or Confirmation" and will be placed in the reexamination file.

*Conclusion*

8. All correspondence relating to this *Ex Parte* reexamination proceeding should be directed as follows:

By U.S. Postal Service Mail to:

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ATTN: Central Reexamination Unit  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

By FAX to:

(571) 273-9900  
Central Reexamination Unit

By hand to:

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Alexandria, VA 22314

By EFS-Web:

Registered users of EFS-Web may alternatively submit such correspondence via the electronic filing system EFS-Web, at

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Any inquiry concerning this communication or earlier communications from the Reexamination Legal Advisor or Examiner, or as to the status of this proceeding, should be directed to the Central Reexamination Unit at telephone number (571) 272-7705.

/Adam L Basehoar/  
Primary Examiner, Art Unit 3992

Conferees:

/JOSHUA D CAMPBELL/  
Primary Examiner, Art Unit 3992

/ALEXANDER J KOSOWSKI/  
Supervisory Patent Examiner, Art Unit 3992