



- (51) International Patent Classification:
H04L 12/56 (2006.01)
- (21) International Application Number:
PCT/US2014/044188
- (22) International Filing Date:
25 June 2014 (25.06.2014)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
13/926,686 25 June 2013 (25.06.2013) US
13/926,684 25 June 2013 (25.06.2013) US
13/926,694 25 June 2013 (25.06.2013) US
13/926,697 25 June 2013 (25.06.2013) US
13/926,708 25 June 2013 (25.06.2013) US
- (71) Applicant: **AMAZON TECHNOLOGIES, INC.**
[US/US]; P.O. Box 8102, Reno, Nevada 89507 (US).
- (72) Inventors: **XIAO, Wei**; 410 Terry Avenue North, Seattle, Washington 98109-5210 (US). **SWIFT, Bjorn Patrick**; 410 Terry Avenue North, Seattle, Washington 98109-5210 (US). **MUNISWAMY-REDDY, Kiran-Kumar**; 410 Terry Avenue North, Seattle, Washington 98109-5210 (US). **FILIBE, Miguel Mascarenhas**; 410 Terry Avenue North, Seattle, Washington 98109-5210 (US). **LU, Yijun**; 410 Terry Avenue North, Seattle, Washington 98109-5210 (US).

(US). **MARSHALL, Stuart Henry Seelye**; 410 Terry Avenue North, Seattle, Washington 98109-5210 (US). **STEFANI, Stefano**; 410 Terry Avenue North, Seattle, Washington 98109-5210 (US). **HAMILTON, James R.**; 410 Terry Avenue North, Seattle, Washington 98109-5210 (US).

(74) Agent: **KOWERT, Robert C.**; Meyertons, Hood, Kivlin, Kowert & Goetzel, P.C., P.O. Box 398, Austin, Texas 78767-0398 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JP, KE, KG, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK,

[Continued on next page]

(54) Title: BURST MODE CONTROL

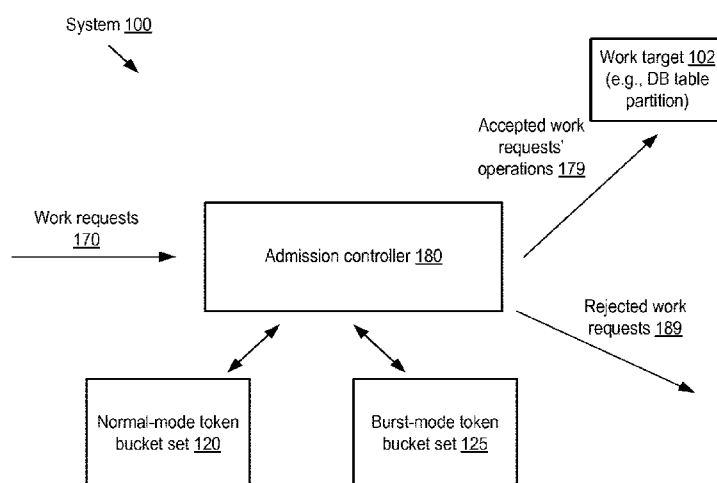


FIG. 1b

(57) Abstract: Methods and apparatus for equitable distribution of excess shared-resource throughput capacity are disclosed. A first and a second work target are configured to access a shared resource to implement accepted work requests. Admission control is managed at the work targets using respective token buckets. A first metric indicative of the work request arrival rates at the work targets during a time interval, and a second metric associated with the provisioned capacities of the work targets are determined. A number of tokens determined based on a throughput limit of the shared resource is distributed among the work targets to be used for admission control during a subsequent time interval. The number of tokens distributed to each work target is based on the first metric and/or the second metric.



EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU,
LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK,
SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, KM, ML, MR, NE, SN, TD, TG).

— *before the expiration of the time limit for amending the
claims and to be republished in the event of receipt of
amendments (Rule 48.2(h))*

Published:

— *with international search report (Art. 21(3))*