(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
30 May 2014 (30.05.2014)

WIPO | PCT

(10) International Publication Number
WO 2014/082052 A4

(51) International Patent Classification:
G06F 12/00 (2006.01)

(21) International Application Number:
PCT/US2013/071783

(22) International Filing Date:
26 November 2013 (26.11.2013)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
13/685,649 26 November 2012 (26.11.2012) US

(71) Applicant: **AMAZON TECHNOLOGIES, INC.** [US/US]; P.O. Box 8102, Reno, Nevada 89507 (US).

(72) Inventors: **MALLIPEDDI, Venkata Harish**; 410 Terry Avenue North, Seattle, Washington 98109-5210 (US). **SURNA, Aleksandras**; 410 Terry Avenue North, Seattle, Washington 98109-5210 (US).

(74) Agent: **MEYERTONS, HOOD, KIVLIN, KOWERT & GOETZEL, P.C.**; KOWERT, Robert 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, 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).

Published:

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

— *with amended claims (Art. 19(1))*

(88) Date of publication of the international search report:
17 July 2014

[Continued on next page]

(54) Title: SCALING COMPUTING CLUSTERS

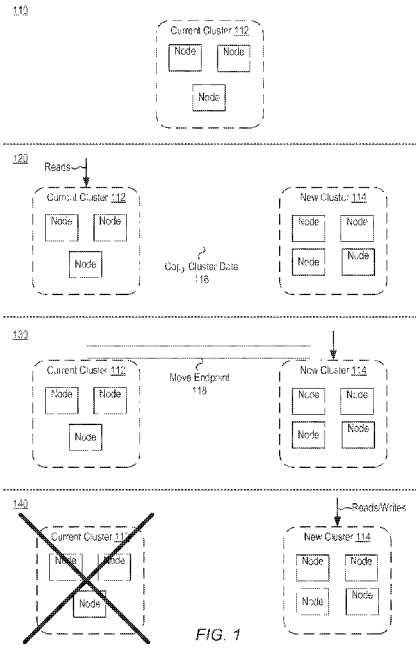

FIG. 1

(57) Abstract: A currently operating computing cluster that has multiple nodes storing cluster data may be scaled. A cluster scaling request may be received for the current cluster indicating a change in a number or type of nodes in the current cluster. In response to receiving the cluster scaling request, a new cluster may be created as indicated in the cluster scaling request, a copy of the cluster data from the current cluster to the nodes in the new cluster may be initiated, a network endpoint for the current cluster may be moved to the new cluster, and the current cluster may be disable. The current cluster may, in some embodiments, respond to read access requests during the copy of the cluster data.

WO 2014/082052 A4

WO 2014/082052 A4

Date of publication of the amended claims: 4 September 2014