



(51) International Patent Classification:
G06F 9/46 (2006.01)

(21) International Application Number:
PCT/US2010/034757

(22) International Filing Date:
13 May 2010 (13.05.2010)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
12/482,318 10 June 2009 (10.06.2009) US

(71) Applicant (for all designated States except US): **THE BOEING COMPANY** [US/US]; 100 North Riverside Plaza, Chicago, Illinois 60606-2016 (US).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **ERIGNAC, Charles A.** [US/US]; 1617 Summit Ave, Apt 34, Seattle, Washington 98122 (US).

(74) Agents: **RAD, Fariba, K et al.**; THE BOEING COMPANY, P.O. Box 2515, MC 110-SD54, Seal Beach, California 90740-1515 (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, 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, IS, JP, KE, KG, KM, 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, PE, PG, PH, PL, PT, RO, RS, RU, 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, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, 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, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

- as to the identity of the inventor (Rule 4.17(i))
- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

[Continued on next page]

(54) Title: **CONSENSUS BASED DISTRIBUTED TASK EXECUTION**

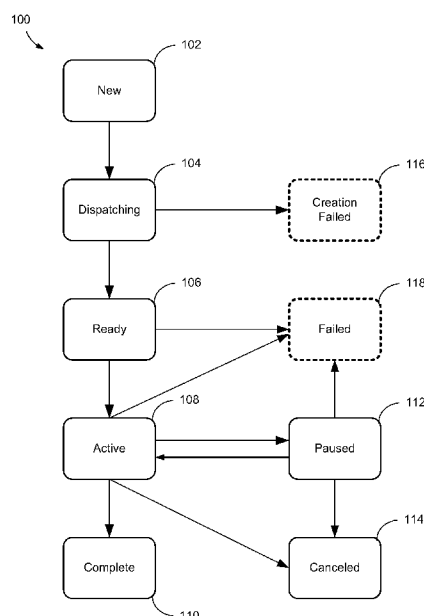


FIG. 1

(57) Abstract: Computer-implemented methods, systems, and computer-readable storage media are disclosed to coordinate a plurality of devices in performing a task. A particular computer-implemented method includes storing updated status information at a device where the updated status information reflects a change in a vote for a task state of one or more of a plurality of devices. A first updated status message is sent to one or more of the plurality of devices where the first updated status message communicates the updated status information. A task consensus at the device is updated when the updated status information indicates that at least a predetermined quantity of the plurality of devices agrees on the task status.

WO 2010/144212 A1



Published:

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