

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
13 February 2020 (13.02.2020)



(10) International Publication Number
WO 2020/033162 A1

- (51) **International Patent Classification:**
G06Q 10/06 (2012.01) *G05B 19/18* (2006.01)
- (21) **International Application Number:**
PCT/US2019/043512
- (22) **International Filing Date:**
25 July 2019 (25.07.2019)
- (25) **Filing Language:** English
- (26) **Publication Language:** English
- (30) **Priority Data:**
16/045,647 25 July 2018 (25.07.2018) US
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(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, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, 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, ST, 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).

(54) **Title: SYSTEMS AND METHODS FOR SUPPORTING MULTIPLE AUTOMATED WORKFLOWS**

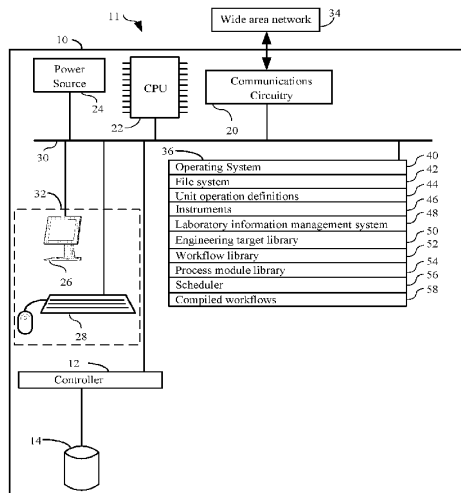


FIG. 1A

(57) **Abstract:** Systems and methods for automated workflow comprise assigning a set of first targets to an uncompiled first workflow. The uncompiled first workflow specifies a first set of process modules. Each such module is associated with a subset of unit operations. Each unit operation includes a time interval and specifies an instrument. For each target in the set of first targets, the uncompiled workflow is translated into an instance of a compiled first workflow comprising a linear temporal order of unit operations, each including execution instructions for an addressed instrument. A set of second targets is obtained and assigned a second uncompiled workflow. Compilation of the second uncompiled workflow for each second target produces a different instance of a compiled second workflow. Each second compiled workflow comprises a linear temporal order of unit operations, with each unit operation including execution instructions for an addressed instrument and specifying a time interval.

[Continued on next page]

Published:

- *with international search report (Art. 21(3))*
- *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))*
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- *with sequence listing part of description (Rule 5.2(a))*