



(51) International Patent Classification:

G06F 9/52 (2006.01) G06F 1/28 (2006.01)
G06F 13/20 (2006.01) G06F 9/50 (2006.01)

(21) International Application Number:

PCT/US2019/056842

(22) International Filing Date:

18 October 2019 (18.10.2019)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

16/190,806 14 November 2018 (14.11.2018) US

(71) Applicant: **INTEL CORPORATION** [US/US]; 2200 Mission College Boulevard, Santa Clara, California 95054 (US).

(72) Inventors: **RAGLAND, Daniel J.**; 22620 SW Schaltenbrand Ln, Sherwood, Oregon 97140 (US). **THERIEN, Guy M.**; 10451 SW 175th Ave, Beaverton, Oregon 97007 (US). **VARMA, Ankush**; 13106 NW Germantown Rd, Portland, Oregon 97231 (US). **DEHAEMER, Eric J.**; 161 Floral St, Shrewsbury, Massachusetts 01545 (US). **MAYO, David T.**; 115 Emanuel Dr., Boxborough, Massachusetts 01719 (US). **GUR, Ariel**; 7a Nahal Dalia Street, 30300

Atlit, HA (IL). **BEN-RAPHAEL, Yoav**; 29 Borochoy Street, 3220329 Haifa, HA (IL). **SECONI, Mark P.**; 16585 SW Estuary Drive, Beaverton, Oregon 97006 (US).

(74) Agent: **ROZMAN, Mark J.** et al.; TROP, PRUNER & HU, P.C., PO Box 41790, Houston, Texas 77241-1790 (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, 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,

(54) Title: SYSTEM, APPARATUS AND METHOD FOR CONFIGURABLE CONTROL OF ASYMMETRIC MULTI-THREADING (SMT) ON A PER CORE BASIS

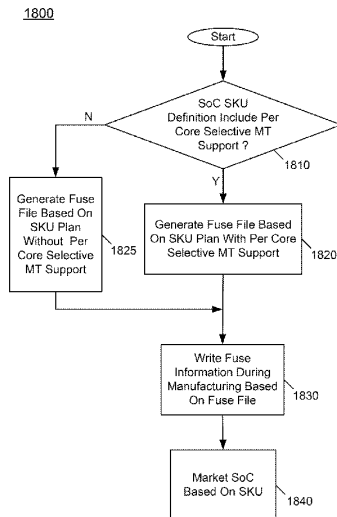


FIG. 18

(57) Abstract: In one embodiment, a processor includes: a plurality of cores each comprising a multi-threaded core to concurrently execute a plurality of threads; and a control circuit to concurrently enable at least one of the plurality of cores to operate in a single-threaded mode and at least one other of the plurality of cores to operate in a multi-threaded mode. Other embodiments are described and claimed.

TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
KM, 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))*

Published:

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