

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
01 October 2020 (01.10.2020)



(10) International Publication Number
WO 2020/197510 A1

- (51) **International Patent Classification:**
G06N 3/06 (2006.01) *G06F 30/38* (2020.01)
- (21) **International Application Number:**
PCT/SG2020/050185
- (22) **International Filing Date:**
27 March 2020 (27.03.2020)
- (25) **Filing Language:** English
- (26) **Publication Language:** English
- (30) **Priority Data:**
10201902803T 28 March 2019 (28.03.2019) SG
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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,

(54) **Title:** A SYSTEM FOR MAPPING A NEURAL NETWORK ARCHITECTURE ONTO A COMPUTING CORE AND A METHOD OF MAPPING A NEURAL NETWORK ARCHITECTURE ONTO A COMPUTING CORE

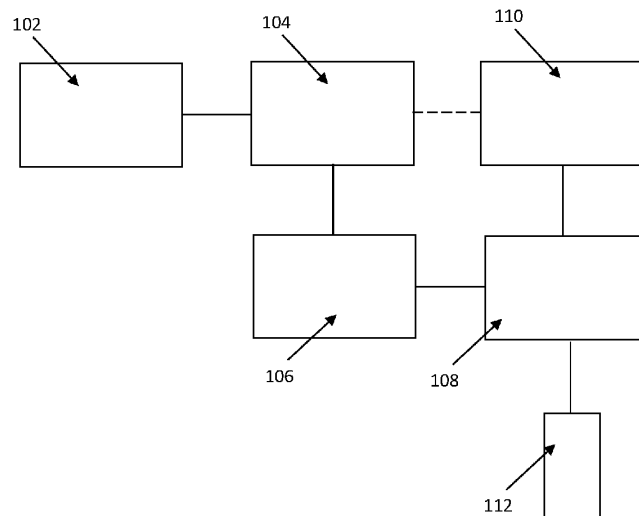


FIG. 1

(57) **Abstract:** A system for mapping a neural network architecture onto a computing core and a method of mapping a neural network architecture onto a computing core may be provided, the system comprises a neural network module configured to provide a neural network; a data input module coupled to the neural network module, the neural network module configured to provide input data to the neural network; a layer selector module coupled to the neural network module, the layer selector module configured to select a layer of the neural network; a pipeline module coupled to the layer selection module, the pipeline module configured to perform at least one backward pipelining analysis from the selected layer of the layer selector module, the pipeline module being arranged to perform the at least one backward pipelining analysis towards an input layer of the neural network; a mapper module coupled to the pipeline module, the mapper module being arranged to receive activation information from the pipeline module, the activation information based on the at least one backward pipelining analysis; and wherein the mapper module is further arranged to map at least the selected layer of the

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SC, SD, SE, SG, SK, SL, ST, SV, SY, TH, TJ, TM, TN, TR,
TT, TZ, UA, UG, US, UZ, VC, VN, WS, 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).

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))*
- *in black and white; the international application as filed contained color or greyscale and is available for download from PATENTSCOPE*