

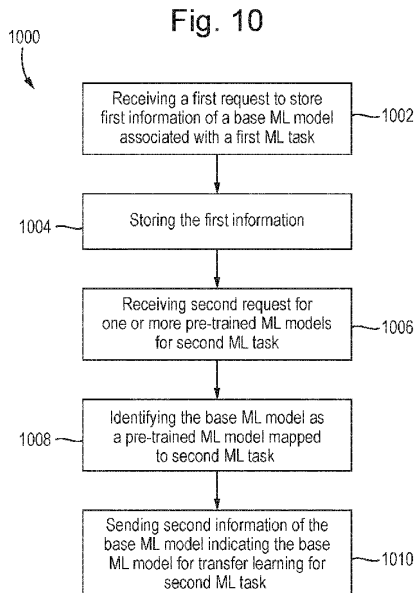


- (51) **International Patent Classification:**
G06N 3/096 (2023.01) *G06N 3/098* (2023.01)
- (21) **International Application Number:**
PCT/EP2024/057791
- (22) **International Filing Date:**
22 March 2024 (22.03.2024)
- (25) **Filing Language:** English
- (26) **Publication Language:** English
- (30) **Priority Data:**
20240100083 08 February 2024 (08.02.2024) GR
- (71) **Applicant: LENOVO (SINGAPORE) PTE. LTD.**
[SG/SG]; 151, Lorong Chuan #02-01, New Tech Park, Singapore 556741 (SG).
- (72) **Inventors: PATEROMICHELAKIS, Emmanouil;**
Breyeller Str. 37, 41751 Viersen (DE). **SAMDANIS, Konstantinos;** Rablst. 18 VI, 81669 Munich (DE).
- (74) **Agent: OPENSHAW & CO.;** 8 Castle Street, Farnham Surrey GU9 7HR (GB).
- (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, CV, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IQ, IR, IS, IT, JM, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, MG, MK, MN, MU, 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, 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, CV, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SC, 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, ME, 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:** STORING PRE-TRAINED MACHINE LEARNING MODELS FOR TRANSFER LEARNING IN A WIRELESS COMMUNICATION NETWORK



(57) **Abstract:** Various aspects of the present disclosure relate to a method (1000) performed by a repository entity, comprising: receiving (1002), from a first application entity, a first request to store a first information of a base ML model, the base ML model being associated with a first ML task; storing (1004) the first information of the base ML model associated with the first ML task; receiving (1006), from a second application entity, a second request for one or more pre-trained ML models for transfer learning for a second ML task; identifying (1008) the base ML model as a pre-trained ML model that can be mapped to the second ML task; and sending (1010), to the second application entity, a second information of the base ML model indicating the base ML model as a pre-trained ML model for transfer learning for the second ML task.

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))*
- *upon request of the applicant, before the expiration of the time limit referred to in Article 21(2)(a)*