

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
08 May 2025 (08.05.2025)



(10) International Publication Number
WO 2025/093817 A1

(51) International Patent Classification:
H01P 1/38 (2006.01)

(21) International Application Number:
PCT/FI2024/050582

(22) International Filing Date:
30 October 2024 (30.10.2024)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
20236221 02 November 2023 (02.11.2023) FI

(71) Applicant: **IQM FINLAND OY** [FI/FI]; Keilaranta 19,
02150 Espoo (FI).

(72) Inventor: **SARSBY, Matthew**; Keilaranta 19, 02150 Es-
poo (FI).

(74) Agent: **BERGGREN OY**; P.O. Box 16, 00100 Helsinki
(FI).

(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).

Declarations under Rule 4.17:

- *as to applicant's entitlement to apply for and be granted a
patent (Rule 4.17(ii))*
- *of inventorship (Rule 4.17(iv))*

Published:

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

(54) Title: STACKED CIRCULATORS AND METHOD FOR STACKING CIRCULATORS

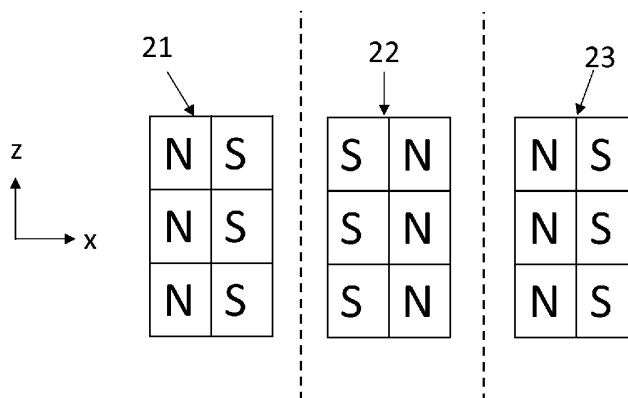


Fig 3a

(57) Abstract: An arrangement comprising two or more circulator assemblies in a stack where the circulator assemblies are stacked adjacent to each other. Each circulator comprises a magnet with a north-seeking pole and a south-seeking pole, and either the south-seeking poles of all magnets in one assembly face toward the south-seeking poles of all magnets in the other assembly, or the north-seeking poles of all magnets in one assembly face toward the north-seeking poles of all magnets in the other assembly.



WO 2025/093817 A1