

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
05 May 2022 (05.05.2022)



(10) International Publication Number
WO 2022/093104 A1

(51) International Patent Classification:

E04B 1/61 (2006.01) *E04G 21/14* (2006.01)
E04B 2/56 (2006.01)

(21) International Application Number:

PCT/SG2020/050615

(22) International Filing Date:

27 October 2020 (27.10.2020)

(25) Filing Language:

English

(26) Publication Language:

English

(72) Inventors; and

(71) Applicants: **WONG, Seng** [SG/SG]; 42 Lorong Ong Lye, #02-06 Rosalia Park, Singapore 536412 (SG). **LEOW, Geok Mui Maey** [SG/SG]; 55 West Coast Way, #07-07, Singapore 127017 (SG). **HENG, Kim Huat** [MY/SG]; 40 Choa Chu Kang Street 64, #04-09 The Quintet, Singapore 689103 (SG).

(74) Agent: **AMICA LAW LLC**; 77 Robinson Road, #22-01 Robinson 77, Singapore 068896 (SG).

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

(54) Title: A WALL JOINT, METHOD AND SYSTEM TO FORM THE WALL JOINT WITH A MECHANICAL CONNECTOR

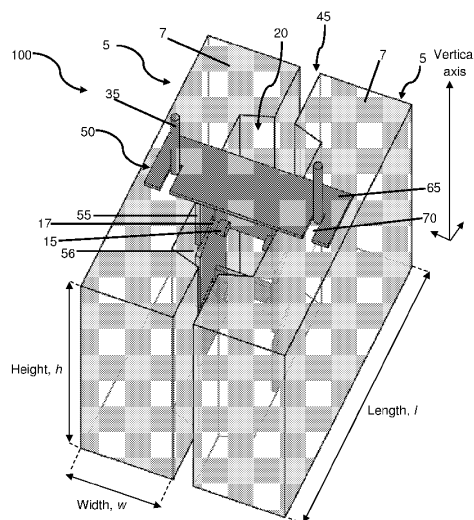


Figure 1

(57) Abstract: Disclosed herein is a wall joint with a mechanical connector and methods of assembly. The wall joint comprises a pair of walls, each wall comprises a first surface and at least one stud protruding from the first surface, wherein the first surfaces face each other with a gap in between; a mechanical connector having at least one pair of slots, wherein the at least one pair of slots are engaged with the at least one stud of each wall; and cured grout in the gap. The assembly method comprises providing a pair of walls, each wall comprises a first surface and at least one stud protruding from the first surface; arranging the first surfaces to face each other with a gap in between; inserting a mechanical connector into the gap, the mechanical connector comprises at least one pair of slots; engaging the studs with the at least one pair of slots; dispensing grout into the gap; and curing the grout to join the walls to form the wall joint.

WO 2022/093104 A1