

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
13 January 2022 (13.01.2022)



(10) International Publication Number
WO 2022/011317 A1

(51) International Patent Classification:
E04D 3/361 (2006.01) *E04D 3/30* (2006.01)

(21) International Application Number:
PCT/US2021/041182

(22) International Filing Date:
09 July 2021 (09.07.2021)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
63/049,747 09 July 2020 (09.07.2020) US
63/071,470 28 August 2020 (28.08.2020) US

(72) Inventor; and

(71) Applicant: NELSON, JR., G. Paul [US/US]; 5000 West Esplanade Avenue, #424, Metairie, Louisiana 70006 (US).

(74) Agent: RODRIGUEZ, Mackenzie et al.; 701 Poydras Street, Suite 4310, New Orleans, Louisiana 70139 (US).

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))
- 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))

(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,

(54) Title: ROOF CONSTRUCTION

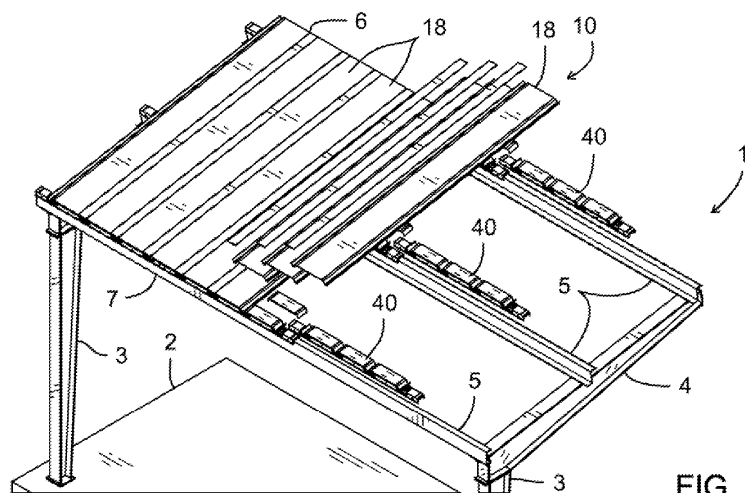


FIG. 1

(57) Abstract: A roof apparatus provides a uniquely configured clip assembly or interface that connects upper roof panels to under supporting beams. In one embodiment, the clip or interface provides multidirectional movement of roof panels to under support beams. In one embodiment, a specially configured U-beam can be an understructure beam that carries utilities such as piping or electricity.



WO 2022/011317 A1