

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
7 February 2002 (07.02.2002)

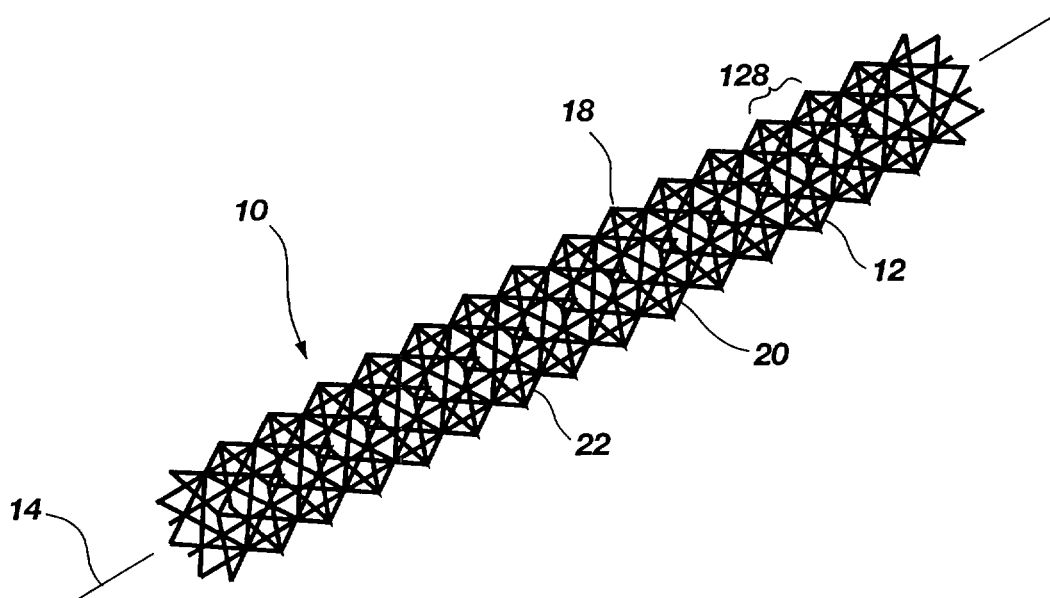
PCT

(10) International Publication Number
WO 02/10535 A2

- (51) International Patent Classification⁷: **E04H** **FRANCOM, Larry, R.** [US/US]; 2145 North Carbonville Road, Helper, UT 84528 (US).
- (21) International Application Number: PCT/US01/23636
- (22) International Filing Date: 27 July 2001 (27.07.2001)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
60/221,445 28 July 2000 (28.07.2000) US
- (71) Applicant (for all designated States except US):
BRIGHAM YOUNG UNIVERSITY [US/US]; A-285 Abraham Smoot Building, P.O. Box 21231, Provo, UT 84602-1231 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **JENSEN, David, W.** [US/US]; 525 West 3050 South, Mapleton, UT 84664 (US).
- (74) Agents: **HOBSON, Garron, M.** et al.; Thorpe North & Western, LLP, P.O. Box 1219, Sandy, UT 84091-1219 (US).
- (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.
- (84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: ISO-TRUSS STRUCTURE



(57) Abstract: An iso-truss structure (10) includes at least two helical components (30, 32) and at least one reverse helical component (34) attached thereto with opposing angular orientations. Each helical and reverse helical component preferably includes at least four elongate, straight segments (22) rigidly connected end to end in a helical configuration forming a single, substantially complete rotation about a common axis (14) forming a first square cross section. The structure may further include at least two rotated helical components (80, 92) and at least one rotated reverse helical component (98) which are rotated with respect to the helical and reverse helical components forming a second square cross section, rotated with respect to the first. The structure may be straight, curved, flexible, or form angles.



Published:

— without international search report and to be republished
upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.