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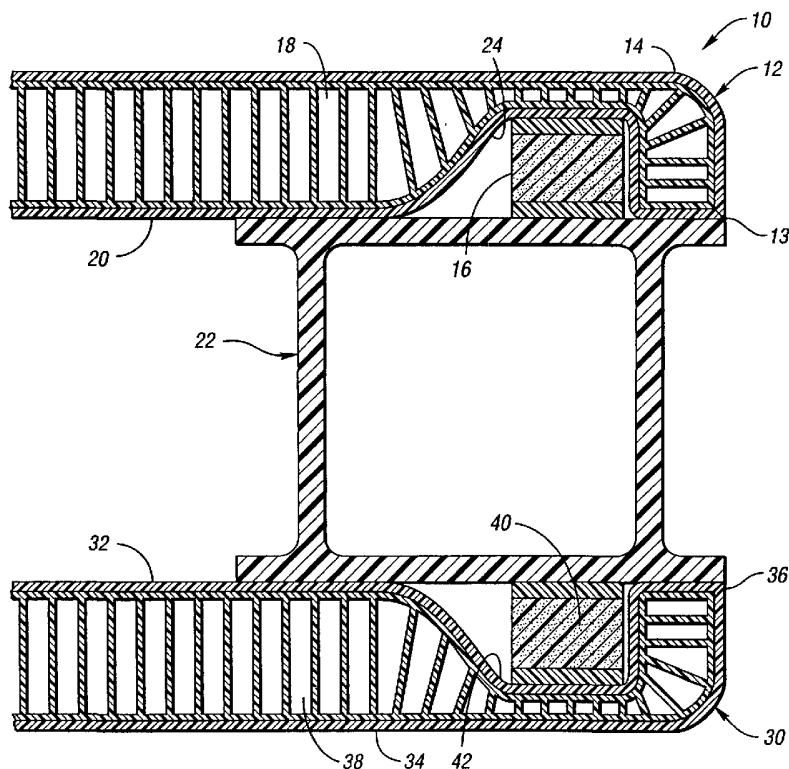
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[Continued on next page]

(54) Title: REINFORCED COMPOSITE PALLET ASSEMBLY OF THE SANDWICH-TYPE WITH A LOCALLY CRUSHED CELLULAR CORE



(57) Abstract: A reinforced composite pallet assembly of the sandwich-type having a cellular core, which is locally crushed, is provided. The assembly includes a pair of substantially flat decks having front, back and side edges. Each of the decks includes a load-bearing skin made of a reinforced thermoplastics material, a grid of reinforcing slats, a cellular core made of a thermoplastics material, and a tine-engaging skin made of a reinforced thermoplastics material. The grid of reinforcing slats is positioned at predetermined places against the tine-engaging skins. The distance between the skins of each deck is reduced during molding of the deck which molding locally crushes the core at the predetermined places. A plurality of supports support the decks at the predetermined places against the reinforcing slats so that tines can lift and support the pallet assembly at the tine-engaging skin. The resulting assembly is ultra light weight, meeting all forecasted government weight restrictions. Other features include molded-in features added as part of the

forming process (i.e., pockets, grooves, and/or ribs on retraining walls).

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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, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, 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)) for the following designations 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, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for the following designations 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,

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A. CLASSIFICATION OF SUBJECT MATTER

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US CL : 108/051.300

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
108/57.25, 57.27, 57.28, 51.3, 51.11, 901, 902

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 3,695,188 A (GRANATSTEIN) 03 October 1972 (03.10.1972), see entire document	
A	US 3,719,157 A (ARCOCHA et al.) 06 March 1973 (06.03.1973), see entire document	
A	US 4,013,021 A (STEINLEIN et al.) 22 March 1977 (22.03.1977), see entire document	
A	US 4,507,348 A (NAGATA et al.) 26 March 1985 (26.03.1985), see entire document	

Further documents are listed in the continuation of Box C.

See patent family annex.

* Special categories of cited documents:

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"P" document published prior to the international filing date but later than the priority date claimed

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