

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

(19) World Intellectual Property  
Organization  
International Bureau

(43) International Publication Date  
19 August 2021 (19.08.2021)



(10) International Publication Number  
**WO 2021/159166 A1**

(51) International Patent Classification:

*E04F 13/08* (2006.01) *B32B 15/18* (2006.01)  
*E04B 1/94* (2006.01)

(21) International Application Number:

PCT/AU2021/000014

(22) International Filing Date:

11 February 2021 (11.02.2021)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

2020900364 11 February 2020 (11.02.2020) AU

(72) Inventor; and

(71) Applicant: **LEE, Walter** [AU/AU]; C/- Intellepro Patent  
& Trade Mark Attorneys, GPO Box 1339, Brisbane, QLD  
4001 (AU).

(74) Agent: **INTELLEPRO PATENT & TRADE MARK  
ATTORNEYS**; GPO Box 1339, Brisbane, Queensland  
4001 (AU).

(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))

(54) Title: WALL CLADDING, PANEL AND ASSEMBLY

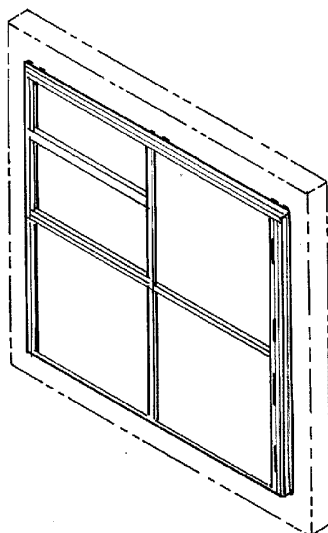


FIG. 20

(57) Abstract: Fire resistant lightweight cladding 10 comprising thin sheet material having an outer layer which is predominantly steel and a thicker inner layer which is predominantly aluminium, the inner layer being a supporting layer and the sheet material being formed into a panel of predetermined outline and used in a fire-resistant wall panel assembly comprising a substrate supporting outer cladding sheets in side by side relation, each cladding sheet being a composite of a relatively thin steel layer and a relatively thick aluminium layer, the sheets described herein have a steel outer layer which is about 4mm thick and an aluminium layer is about 2mm thick and panel density from 6kg/m<sup>2</sup> to 9kg/m<sup>2</sup>. The panels were tested according to British Standard BS 8414-22015 (amdt 1) as modified by Australian 5113-2016 (amdt 1) and the specimen passes the classification criteria 5.4.4(b) which concerns the temperature differential from outer fireside and inside and 5.4.5(g) which concerns debris.

WO 2021/159166 A1