

PCTWORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶ : E04C 3/07, 3/09	A1	(11) International Publication Number: WO 97/28326 (43) International Publication Date: 7 August 1997 (07.08.97)
(21) International Application Number: PCT/AU97/00053 (22) International Filing Date: 30 January 1997 (30.01.97) (30) Priority Data: PN 7862 2 February 1996 (02.02.96) AU (71) Applicants (for all designated States except US): THE BROKEN HILL PROPRIETARY COMPANY LIMITED [AU/AU]; 600 Bourke Street, Melbourne, VIC 3000 (AU). THE UNIVERSITY OF SYDNEY [AU/AU]; Parramatta Road, Sydney, NSW 2006 (AU). (72) Inventors; and (75) Inventors/Applicants (for US only): HANCOCK, Gregory [AU/AU]; 44 Herbert Street, Newport, NSW 2106 (AU). CELEBAN, Michael [AU/AU]; 6 Chrisan Close, Werrington, NSW 2747 (AU). (74) Agent: GRIFFITH HACK; Patent and Trade Mark Attorneys, P.O. Box 4164, Sydney, NSW 2001 (AU).		(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, ARIPO patent (KE, LS, MW, SD, SZ, UG), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG). Published With international search report.

(54) Title: Z-SECTION STRUCTURAL MEMBER

(57) Abstract

An elongate structural member which is cold formed from roll-reduced steel and which has a Z-shaped cross section comprising a web (10), two oppositely directed parallel flanges (11 and 12) projecting outwardly from respective ends of the web, and lips (13 and 14) at the outer edges of the respective flanges. The first one (11) of the flanges has a width which is narrower than that of the second flange (12) whereby two of the structural members may be joined in overlapping relationship. The respective lips (13 and 14) are formed with lip returns (15 and 16) which are disposed at included angles (θ_1 and θ_2) not greater than 180° and preferably in the order of 55° to 95° with respect to the lips. Also, the lip (14) on the second flange (12) projects in a direction to form an obtuse angle (ϕ_2) with respect to the second flange which preferably is within the range 95° to 135° .

