

J 11 JUL 2003

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

(19) World Intellectual Property Organization
International Bureau(43) International Publication Date
29 August 2002 (29.08.2002)

PCT

(10) International Publication Number
WO 02/066185 A1(51) International Patent Classification⁷: B22D 17/00.
17/20, B29C 45/17

(21) International Application Number: PCT/CA01/01654

(22) International Filing Date:
21 November 2001 (21.11.2001)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
09/791,373 23 February 2001 (23.02.2001) US

(71) Applicant: HUSKY INJECTION MOLDING SYSTEMS LTD. [CA/CA]; AMC/IP Group, 500 Queen Street South, Bolton, Ontario L7E 5S5 (CA).

(72) Inventors: KESTLE, Martin, R.; R.R. #3 Site, 16, P.O. Box 7, Everett, Ontario L0M 1J0 (CA). TOOMEY, Clive, A.; 13288 Highway 27, P.O. Box 924, Nobleton, Ontario L0G 1N0 (CA). PAULOVIC, Anthony; 65 Valleyranch Road, Irishtown, New Brunswick E1H 2R1 (CA).

(74) Agent: GAMMIE, Alexander, P.; Husky Injection Molding Systems Ltd., Dept. IP Group/AMC, 500 Queen Street South, Bolton, Ontario L7E 5S5 (CA).

(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, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW.(84) Designated States (*regional*): 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, 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).**Published:**

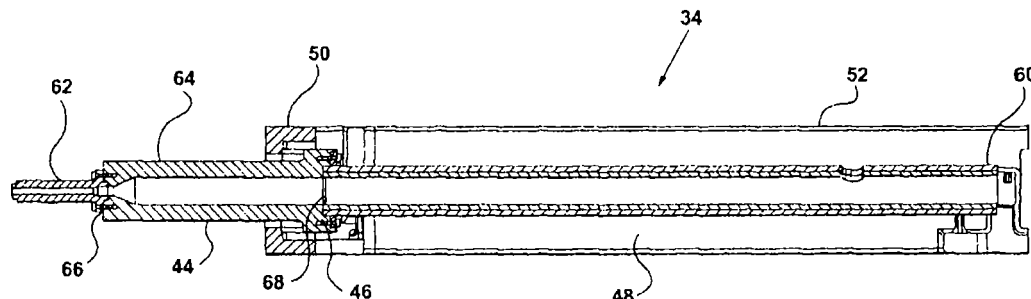
- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

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.



162162

(54) Title: BARREL ASSEMBLY



(57) **Abstract:** The invention relates broadly to injection molding machines and more particularly to a novel barrel assembly for use in an injection unit of an injection molding machine. Barrels are conventionally mounted at an end in a carriage of an injection unit. Axial carriage force is directed along the entire length of the barrel which requires a thick barrel wall to withstand the axial carriage force. A barrel assembly is disclosed having a first barrel coupler (46) and a second barrel coupler (60). The first barrel coupler secures the barrel intermediate the ends of the barrel to a carriage. The second barrel coupler retains an end of the barrel in the carriage preventing rotation of the barrel during operation. The barrel section between the first barrel coupler and an end of the barrel is isolated from axial carriage force in operation.

WO 02/066185 A1



ACTION