

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
25 October 2007 (25.10.2007)

PCT

(10) International Publication Number
WO 2007/121176 A3

(51) International Patent Classification:

B29C 47/74 (2006.01)

(21) International Application Number:

PCT/US2007/066327

(22) International Filing Date: 10 April 2007 (10.04.2007)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

11/279,379 11 April 2006 (11.04.2006) US

11/733,124 9 April 2007 (09.04.2007) US

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(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

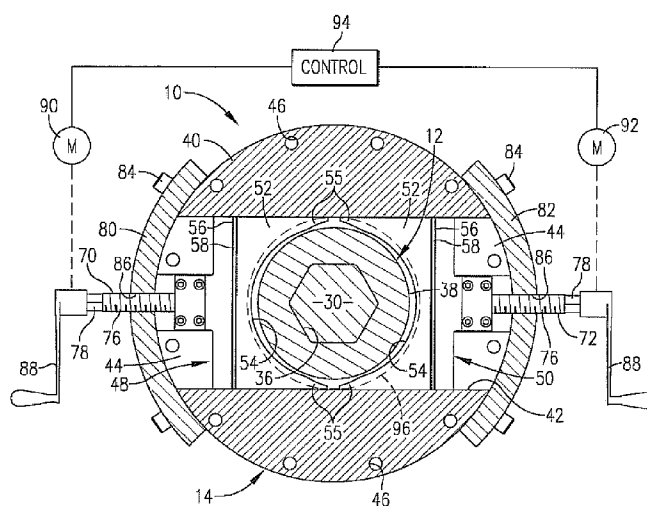
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (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))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

[Continued on next page]

(54) Title: EXTRUDER MID-BARREL ADJUSTABLE VALVE ASSEMBLY



(57) Abstract: Flow restriction assemblies (10, 10a, 10b) adapted to be mounted on extruders (16, 16b, 32) in order to allow adjustment of material flow (16, 16b, 32), with consequent alteration, in back pressure, shear and mechanical energy imparted to the material being processed. The assemblies (10, 10a, 10b) each have shearlock(s) (12, 12a, 12b) mounted on the extruder drive shaft(s) (30, 30a, 30b), together with restriction units (14, 14a, 14b). The units (14, 14a, 14b) have opposed flow restriction components (48, 50, 48a, 50a, 48b, 50b) supported on opposite sides of the corresponding shearlocks (12, 12a, 12b) and mounted for a substantially aligned and rectilinear back and forth sliding movement. The clearance between the inner surfaces (54, 54a, 54b) of the components (48, 50, 48a, 50a, 48b, 50b) and the shearlocks (12, 12a, 12b) can be selectively adjusted. Preferably, the restriction components (48, 50, 48a, 50a, 48b, 50b) are moveable such that the inner surfaces (54, 54a, 54b) thereof may be located inboard of the outer surfaces (29, 29a, 29b) of the screw flighting.

WO 2007/121176 A3



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*

(88) Date of publication of the international search report:

31 July 2008

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US07/66327

A. CLASSIFICATION OF SUBJECT MATTER

IPC: **B29C 47/74** (2006.01)

USPC: 366/80

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)

U.S. : 366/79-80, 82-85, 88-90; 425/204, 208, 209; B29B; B29C 47/70, 47/74

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
None

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

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,335,991 A (WOBBE) 09 August 1994 (09.08.1994), see entire document.	1-6, 10-20, 24-31
X	US 4,103,355 A (WEBER) 25 July 1978 (25.07.1978), see entire document.	1-3, 5, 10-11, 13-17, 19, 24-25, 28-31
X	US 3,870,285 A (BAUSCH et al.) 11 March 1975 (11.03.1975), see entire document.	1-6, 10-20, 24-31
X	US 5,145,251 A (SHIRATO et al.) 08 September 1992 (08.09.1992), see entire document.	1-6, 10-20, 24-31
Y	US 5,909,958 A (RAUWENDAAL) 08 June 1999 (08.06.1999), see col. 8, line 15 - col. 9, line 10).	7, 9, 21, 23
Y	US 4,136,968 A (TODD) 30 January 1979 (30.01.1979), see col. 3, lines 56-62.	8, 22



Further documents are listed in the continuation of Box C.



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"O"	document referring to an oral disclosure, use, exhibition or other means		
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Date of the actual completion of the international search

26 May 2008 (26.05.2008)

Date of mailing of the international search report

17 JUN 2008

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