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| <p>(51) International Patent Classification:
 <i>B29C 45/28</i> (2006.01) <i>B29C 45/77</i> (2006.01)
 <i>B29C 45/76</i> (2006.01) <i>B29C 45/17</i> (2006.01)</p> | <p>ant View Court, Washington Township, MI 48094 (US).
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| <p>(21) International Application Number:
 PCT/US2020/036774</p> | <p>(74) Agent: EVANINA, Gunther, J.; Butzel Long Docketing
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 MI 48864 (US).</p> |
| <p>(22) International Filing Date:
 09 June 2020 (09.06.2020)</p> | <p>(81) Designated States (<i>unless otherwise indicated, for every
 kind of national protection available</i>): 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, 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.</p> |
| <p>(25) Filing Language: English</p> | |
| <p>(26) Publication Language: English</p> | |
| <p>(30) Priority Data:
 16/444,677 18 June 2019 (18.06.2019) US</p> | |
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(54) Title: FLOW CONTROL OF AN INJECTION MOLDING SYSTEM

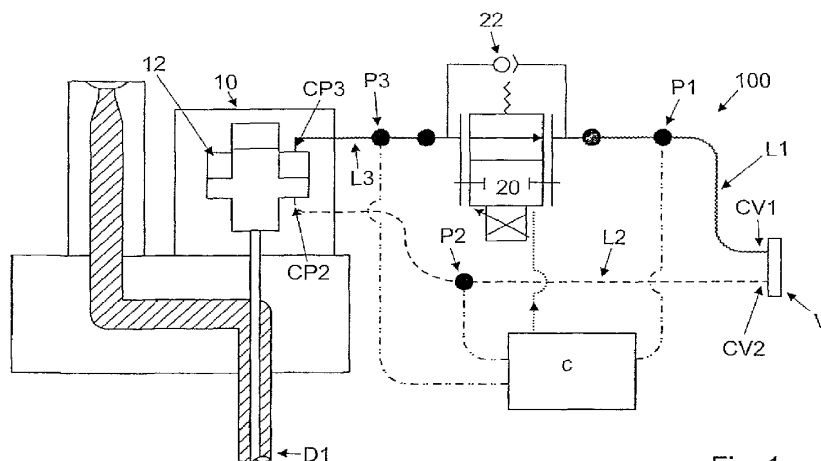


Fig. 1

(S7) Abstract: Injection molding system comprising at least one first actuator-system (D1, D2, D3), the first actuator system comprising: at least one piston drive having at least two pressure line connectors (CP2, CP3) to drive a piston to open or close a molding nozzle, pressure lines (L1, L2) connectable to a changeover valve (V) having a pressure line connector (P) and tank line connector (T) and at least two changeover pressure line connectors, wherein the first changeover valve pressure line connector (CV1) is connectable to a first pressure line (L1) and the second changeover valve pressure line connector (CV2) is connectable to a second pressure line (L2), wherein the second pressure line (L2) is connected to the second pressure line connector (CP2) of the piston drive, an electronically adjustable flow control valve having a first pressure line connector and a second pressure line connector, wherein the first pressure line connector of the adjustable flow control valve being connected to the first pressure line (L1) to allow a connection to the first pressure line connector (CV1) of the changeover valve (V), and the second pressure line connector is connected to a third pressure line (L3) which establishes a connection to the second pressure line connector (CP3) of the piston drive, at least one electronic flow sensor for (P1, P2, P3) sensing flow rate in the first, second and/or third pressure lines (L1, L2, L3), a controller connected to the adjustable flow control valve and to the at least one sensor, configured to electronically adjust the flow control valve, depending on information of the at least one sensor, controlling thereby the timing and the speed of the movement of the piston and the molding nozzle.

(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))*
 - *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*
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