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(74) Agents: YAMASAKI, Yukuzo et al.; Yamasaki & Partners, Sogo Nagatacho Bldg. 8F, 11-28, Nagatacho 1-chome, Chiyoda-ku, Tokyo, 1000014 (JP).

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(71) Applicant (for all designated States except US): Tonen Chemical Corporation [JP/JP]; 8-5, Kohnan 1-chome, Minato-ku, Tokyo, 1080075 (JP).

(72) Inventors; and

(75) Inventors/Applicants (for US only): TAKITA, Kotaro [JP/JP]; 202 Rafine-nakazato III, 200-8 Tayuutuka, Nasushiobara-shi, Tochigi, 3292735 (JP). NOGATA, Tetsuro [JP/JP]; Dia Palace 801, 2-13-11 Honcho, Kawasaki-ku, Kawasaki-shi, Kanagawa, 2100001 (JP).

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(54) Title: IMPROVED CROSS FLOW MANIFOLD EXTRUSION DIE AND A METHOD OF EXTRUSION

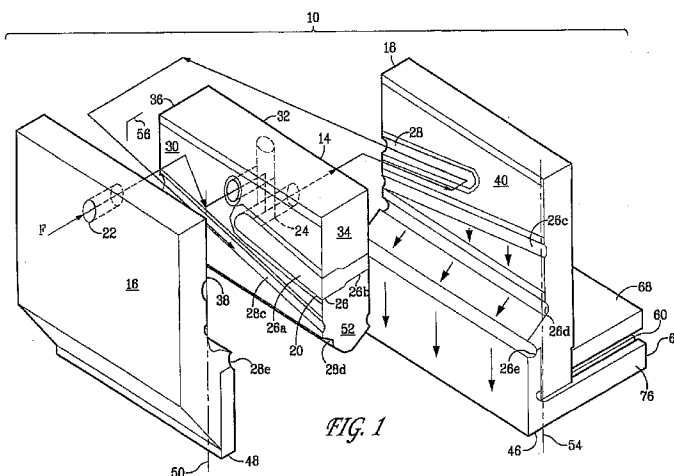


FIG. 1

(57) Abstract: An extrusion die (10) for producing a film or sheet of thermoplastic material. The extrusion die includes a die outlet through which a melt stream of the thermoplastic material is extruded as a film or sheet, the die outlet comprising a first die lip (46) and a second die lip (48), a feed entrance in communication with a feed splitter (24) for dividing the thermoplastic material into a first portion and a second portion; and a first die section (14) having a cross flow manifold comprising: a first cross flow manifold section (26) for receiving the first portion of the thermoplastic material, and a second cross flow manifold section (28) for receiving the second portion of the thermoplastic material. A process for making a film or sheet of thermoplastic material is also provided.

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

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ADD. B29C47/06

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)
B29C

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

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C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 329 964 A (DEREZINSKI STEPHEN J [US]) 19 July 1994 (1994-07-19)	1,2,8, 13,14, 20,24,25
Y	column 1, line 10 - line 30 column 2, line 60 - column 3, line 57; figures 1-6	5,9-11, 17,21-23
X	US 5 320 679 A (DEREZINSKI STEPHEN J [US] ET AL) 14 June 1994 (1994-06-14) column 1, line 10 - line 36 column 3, line 30 - line 56; figures 1-7	1,2,8, 13,14,20
X	US 3 308 222 A (LLOYD KOVACS) 7 March 1967 (1967-03-07) column 1, line 10 - line 23 column 2, line 9 - column 3, line 21; figures 1-7	1,2,8, 13,14,20
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Further documents are listed in the continuation of Box C.

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NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040,
Fax: (+31-70) 340-3016

Authorized officer

Ingelgård, Tomas

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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>ANONYMOUS: "Die for extruding film" RESEARCH DISCLOSURE, MASON PUBLICATIONS, HAMPSHIRE, GB, vol. 328, no. 38, 1 August 1991 (1991-08-01), XP007116721 ISSN: 0374-4353 figures 1-3</p> <p style="text-align: center;">-----</p>	<p>1,2,8, 13,14,20</p>
Y	<p>US 3 559 239 A (WORK WILLIAM A ET AL) 2 February 1971 (1971-02-02) figure 3</p> <p style="text-align: center;">-----</p>	<p>5,9-11, 17,21-23</p>

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/JP2008/066920

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