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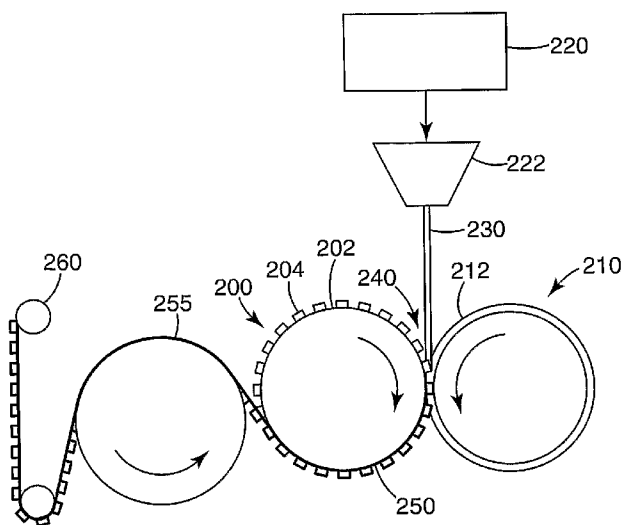
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[Continued on next page]

(54) Title: STRUCTURED POLYMER FILMS AND METHODS FOR FORMING THE SAME



(57) Abstract: A method for forming a structured polymeric film having a plurality of longitudinally spaced structures on both sides of the structured polymeric film is described. The method includes: providing a rotatable tool (200) having an outer circumferential surface, the outer circumferential surface including a plurality of tool projections (204); providing a nip roll (210) having a smooth conformable outer circumferential surface (212) opposed to the outer circumferential surface of the tool; introducing a polymer layer into a nip between the tool and the nip roll; pressing the polymer layer between the tool and the nip roll to form web recesses into a first side of the polymer layer and web projections extending away from an opposing second side of the polymer layer, with the tool projections on the circumferential surface of the tool and form a structured web; and removing the structured web from the tool. Similar processing articles are also described.

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INTERNATIONAL SEARCH REPORT

International application No
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A. CLASSIFICATION OF SUBJECT MATTER
INV. B01L3/00 B29C51/20 B29C39/14 B29C43/22 B29C59/00

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 B32B B01L

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)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2002/037386 A1 (BONKE DOUGLAS D) 28 March 2002 (2002-03-28)	1-5, 7, 9
Y	paragraphs [0015], [0051], [0053] - [0055], [0066] figures 2,4 ----- -/--	6, 8-12

Further documents are listed in the continuation of Box C.

See patent family annex.

* Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
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- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
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- * & * document member of the same patent family

Date of the actual completion of the international search

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Name and mailing address of the ISA/

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INTERNATIONAL SEARCH REPORT

International application No
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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.
Y	US 6 375 871 B1 (BENTSEN JAMES G ET AL) 23 April 2002 (2002-04-23) column 1, line 27 - line 36 column 2, line 20 - line 27 column 3, line 21 - line 29 column 3, lines 32-37 column 5, line 23 - line 25 column 5, line 43 - line 54 column 7, line 39 column 8, line 5 - line 14 column 8, line 21 - line 25 figures 1,4-7	6,8, 10-12
X	US 3 399 101 A (MAGID EUGENE A) 27 August 1968 (1968-08-27)	1-5,7, 10,11
Y	column 2, line 25 - line 37 column 2, line 55 - line 64 column 3, line 37 - line 41 figures 2,4,6	6,8,9,12
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A	US 6 827 906 B1 (BJOERNSON TORLEIF OVE ET AL) 7 December 2004 (2004-12-07) column 16, line 13 - line 25; figures 5,6	1,2,7
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Y	figures 1,4,5,20,28a page 21, lines 23-27 page 37, lines 10-15 page 38, line 27 - page 39, line 8 page 46, line 30 - page 47, line 4 page 47, lines 5-11	14
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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2006/001074

Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:

3. Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- The additional search fees were accompanied by the applicant's protest.
- No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-12

A method for forming a structured polymeric film

2. claims: 13-19

A sample processing article

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2006/001074

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