

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
27 September 2001 (27.09.2001)

PCT

(10) International Publication Number
WO 01/70877 A3

(51) International Patent Classification⁷: **C08L 23/04**,
23/08, C08J 5/18 // (C08L 23/08, 23:02) (C08L 23/04,
23:02)

Hills, IL 60061 (US). **YANG, Tahua**; 6709 Greene Road,
Woodridge, IL 60517 (US). **SANDFORD, Craig**; 65 West
Jeffery, Wheeling, IL 60090 (US). **CHANG, Tao**; 1309 Big
Bluestem Court, Ames, IA 50014 (US).

(21) International Application Number: PCT/US01/07439

(22) International Filing Date: 8 March 2001 (08.03.2001)

(74) Agents: **MATTENSON, Charles** et al.; Baxter Healthcare
Corporation, One Baxter Parkway, DF3-3E, Deerfield, IL
60015 (US).

(25) Filing Language: English

(81) Designated States (*national*): AT, AU, BR, CA, CH, CN,
DE, DK, ES, GB, ID, IN, JP, KR, MX, PT, SE, SG, TR.

(26) Publication Language: English

(30) Priority Data:
09/526,357 16 March 2000 (16.03.2000) US

(84) Designated States (*regional*): European patent (AT, BE,
CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC,
NL, PT, SE, TR).

(71) Applicant: **BAXTER INTERNATIONAL INC.**
[US/US]; Baxter Healthcare Corporation, One Baxter
Parkway, DF3-3E, Deerfield, IL 60015 (US).

Published:
— with international search report

(72) Inventors: **WOO, Leon**; 1013 Shari Lane, Libertyville,
IL 60048 (US). **SHANG, Sherwin**; 346 Southgate Drive,
Vernon Hills, IL 60061 (US). **LING, Michael, T., K.**; 1672
N. Cypress Pointe Drive, Vernon Hills, IL 60061 (US).
DING, Yuan-pang, Samuel; 302 Richmond Lane, Vernon

(88) Date of publication of the international search report:
14 March 2002

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: AUTOCLAVABLE NON-ADHERENT, HEAT SEALABLE POLYMER BLENDS FOR FABRICATING MONOLAYER AND MULTIPLE LAYERED FILMS



(57) Abstract: The present invention provides a polymer blend for fabricating monolayer films or a layer within a multilayer film. The blend has a first component and a second component. The first component is selected from the group of: (1) an ethylene and α -olefin copolymer having a density of less than about 0.915 g/cc, (2) lower alkyl acrylates, (3) lower alkyl substituted alkyl acrylates and (4) ionomers. The first component should be present in an amount from about 99 % to about 55 % by weight of the blend. The second component in an amount by weight of the blend from 45 % to about 1 % and consists of one or more polymers of the group: (1) propylene containing polymers, (2) polybutene polymers, (3) polymethylpentene polymers, (4) cyclic olefin containing polymers and (5) bridged polycyclic hydrocarbon

containing polymers. When the blend is fabricated into a film it has a modulus of elasticity when measured in accordance with ASTM D882 of less than about 60,000 psi, an internal haze when measured in accordance with ASTM D1003 of less than about 25 %, an internal adhesion ranking of greater than about two, a sample creep at 120 °C under 27 psi loading of less than or equal to 150 % for a film having a thickness from about 5 mils to about 15 mils, and the film being capable of being heat sealed into a container having seals wherein the seals remain intact when the container is autoclaved at 121 °C for one hour.

WO 01/70877 A3

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 01/07439

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C08L23/04 C08L23/08 C08J5/18 //(C08L23/08,23:02),
(C08L23/04,23:02)

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)

IPC 7 C08L C08J

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, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>US 4 401 536 A (LUNDELL EDWIN O ET AL) 30 August 1983 (1983-08-30) cited in the application</p> <p>abstract column 2, line 60 - line 68 column 3, line 1 - line 10 column 3, line 44 - line 55 column 4, line 29 - line 36 column 4, line 46 - line 67 column 5, line 8 - line 15 column 5, line 23 - line 48 column 6, line 24 - line 25 column 6, line 31 - line 40 example 1 table 1.2</p> <p>-/--</p>	<p>1,2, 16-21, 35,36, 50-55, 69,70, 84-89, 103</p>

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in 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)

O document referring to an oral disclosure, use, exhibition or other means

P document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

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

Y document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

& document member of the same patent family

Date of the actual completion of the international search

26 September 2001

Date of mailing of the international search report

05/10/2001

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Droghetti, A

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 01/07439

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.

INTERNATIONAL SEARCH REPORT

Information on patent family members

Inter. Journal Application No

PCT/US 01/07439

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 4401536	A	30-08-1983	NONE