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(54) Title: Microbiological reprocessing of degumming residue formed during biodiesel production

(57) Abstract: An industrial method of reprocessing degumming residue from the initial purification of natural fats as well as a feed additive, which may be produced using the said method.

## INTERNATIONAL SEARCH REPORT

International application No

PCT/PL2009/050005

A. CLASSIFICATION OF SUBJECT MATTER  
 INV. A23K1/00 A23J1/18

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)  
 A23K A23J

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, FSTA, COMPENDEX, BIOSIS

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
E	WO 2009/061225 A (SKOTAN SPOLKA AKCYJNA [PL]; RYMOWICZ WALDEMAR [PL]) 14 May 2009 (2009-05-14) page 5, line 9 - line 10	1, 13
X	US 3 843 800 A (LANGEJAN A) 22 October 1974 (1974-10-22) example II; table II	11-13
X	US 3 713 976 A (BUNTING P ET AL) 30 January 1973 (1973-01-30) example IV; table IV	11-13
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Further documents are listed in the continuation of Box C.

See patent family annex.

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## INTERNATIONAL SEARCH REPORT

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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.
A	<p>PAPANIKOLAOU SERAPHIM ET AL: "Lipid production by <i>Yarrowia lipolytica</i> growing on industrial glycerol in a single-stage continuous culture"</p> <p>BIORESOURCETECHNOLOGY, ELSEVIER BV, GB, vol. 82, no. 1, 1 March 2002 (2002-03-01), pages 43-49, XP002537161 ISSN: 0960-8524</p> <p>page 44, left-hand column, paragraph 2 - right-hand column, paragraph 1; tables 1,2 page 47, left-hand column, paragraph 3 - page 48, left-hand column, paragraph 4</p>	1-15
A	<p>PAPANIKOLAOU ET AL: "Biotechnological valorisation of raw glycerol discharged after bio-diesel (fatty acid methyl esters) manufacturing process: Production of 1,3-propanediol, citric acid and single cell oil"</p> <p>BIOMASS AND BIOENERGY, PERGAMON, OXFORD, GB, vol. 32, no. 1, 19 December 2007 (2007-12-19), pages 60-71, XP022393501 ISSN: 0961-9534</p> <p>page 64, left-hand column, paragraph 3 - page 65, right-hand column, paragraph 1; tables 2,3 page 68, left-hand column, paragraph 3 - page 69, right-hand column, paragraph 2</p>	1-15
A	<p>JIE-WAN KIM ET AL: "High Cell Density Culture of <i>Yarrowia lipolytica</i> Using a One-Step Feeding Process"</p> <p>BIOTECHNOLOGY PROGRESS, AMERICAN INSTITUTE OF CHEMICAL ENGINEERS, US, vol. 16, no. 4, 7 June 2000 (2000-06-07), pages 657-660, XP007904669 ISSN: 8756-7938 abstract</p>	1-15
A	<p>DROSE S ET AL: "Full recovery of the NADH:ubiquinone activity of complex I (NADH:ubiquinone oxidoreductase) from <i>Yarrowia lipolytica</i> by the addition of phospholipids"</p> <p>BIOCHIMICA ET BIOPHYSICA ACTA. BIOENERGETICS, AMSTERDAM, NL, vol. 1556, no. 1, 3 October 2002 (2002-10-03), pages 65-72, XP004383219 ISSN: 0005-2728 page 71, left-hand column, paragraph 2 abstract</p>	1-15

# INTERNATIONAL SEARCH REPORT

Information on patent family members

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Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 2009061225	A	14-05-2009	NONE	
US 3843800	A	22-10-1974	NONE	
US 3713976	A	30-01-1973	NONE	