

The examination is being carried out on the **following application documents**

Description, Pages

1-39 as published

Claims, Numbers

1-16 received on 22-10-2010 with letter of 22-10-2010

Drawings, Sheets

1/1 as published

Reference is made to the following documents; the numbering will be adhered to in the rest of the procedure:

- D1 AKINMOLADUN AFOLABI C ET AL: "Effect of Aloe barbadensis on the lipid profile and fasting blood sugar concentration of rabbits fed high cholesterol diet" GLOBAL JOURNAL OF PURE AND APPLIED SCIENCES, GLOBAL JOURNAL SERIES, NG, vol. 10, no. 1, 1 January 2004 (2004-01-01) , pages 139-142, XP008122818ISSN: 1118-0579
- D2 DATABASE MEDLINE [Online] US NATIONAL LIBRARY OF MEDICINE (NLM), BETHESDA, MD, US; August 1985 (1985-08) , AGARWAL O P: "Prevention of atheromatous heart disease." XP002587669 Database accession no. NLM2864002 ; & ANGIOLOGY AUG 1985 LNKD-PUBMED:2864002,vol. 36, no. 8, August 1985 (1985-08), pages 485-492,ISSN: 0003-3197
- D3 DATABASE WPI Week 200426 Thomson Scientific, London, GB; AN 2004-270434, XP002587670 & CN 1 468 607 A (SONG Y) 21 January 2004 (2004-01-21)
- D4 MASCOLO NICOLA ET AL: "Healing powers of aloes" MEDICINAL AND AROMATIC PLANTS--INDUSTRIAL PROFILES, CRC PRESS, GB, vol. 38, 1 January 2004 (2004-01-01) , pages 209-238, XP008122820ISSN: 1027-4502

D5 JP 2005 068132 A (ENKAKU IRYO KENKYUSHO KK) 17 March 2005
(2005-03-17)

D6 "Appiraka Chendooram" KEY ATTRIBUTES OF THDL,, 1 January 1879
(1879-01-01) , pages 1-3, XP007913282

D7 "Nuskha-e-zulal"KEY ATTRIBUTES OF TKDL,, 1 January 1899
(1899-01-01) , pages 1-2, XP007913278

D8 TANAKA MIYUKI ET AL: "Identification of five phytosterols from Aloe vera gel as anti-diabetic compounds."BIOLOGICAL & PHARMACEUTICAL BULLETIN JUL 2006 LNKD- PUBMED:16819181, vol. 29, no. 7, July 2006 (2006-07) , pages 1418-1422, XP002587671ISSN: 0918-6158

D9 BEPPU H ET AL: "Hypoglycaemic and antidiabetic effects in mice of Aloe arborescens Miller var. natalensis Berger"PHYTOTHERAPY RESEARCH 1993 GB, vol. 7, no. SPEC. ISS., 1993 , pages S37-S42, XP002587672ISSN: 0951-418X

D10 ABOU-ZEID A. ET AL.: "Chemical and Biological Study of the Leaves of some Musa Species."EGYPT. J. PHARM. SCI., vol. 39, no. 4-6, 1998 , pages 379-398, XP002990128

D11 YEH G. ET AL.: "Sytematic Review of Herbs abd Dietary Supplements for Glycemic Control in Diabetes."DIABETES CARE., vol. 26, no. 4, 2003 , pages 1277-1294, XP002990127

D12 CAN A. ET AL.: "Effect of Aloe vera Leaf Gel and Pulp Extracts on the Liver in Type-II Diabetic Rat Models."BIOL. PHARM. BULL., vol. 27, no. 5, 2004 , pages 694-698, XP002990130

D13 JP 2003 286185 A

1 The present application does not meet the requirements of Article 52(1) EPC because the subject-matter of claim 1-16 is not new within the meaning of Article 54(1) and (2) EPC.

1.1 D1 discloses the subject matter of claims 1-16, i.e. that aloe barbadensis extract obtained from the gel by crushing and extraction with distilled water is efficient in lowering plasma sugar level.

- 1.2 D2 discloses the subject matter of claims 1-16, i.e. that after adding the 'Husk of Isabgol' and 'aloe vera' (an indigenous plant known as ghee-guar-ka-paththa) to the diet, a marked reduction in total serum cholesterol, serum triglycerides, fasting and post prandial blood sugar level in diabetic patients, total lipids and also increase in HDL were noted.
- 1.3 D3 discloses the subject matter of claims 1-16, i.e. that a mixture comprising aloe vera juice is useful to treat type I and type II diabetes.
- 1.4 D4 discloses the subject matter of claims 1-16, i.e. that aloe gel administered orally is useful for treating diabetes and might be useful for lowering blood sugar in patients with diabetes.
- 1.5 D6 discloses the subject matter of claims 1-16, i.e. a composition comprising the juice of Aloe barbadensis Miller is useful for treating diabetes mellitus.
- 1.6 D7 discloses the subject matter of claims 1-16, i.e. that Aloe barbadensis mill. is useful for treating diabetes mellitus
- 1.7 D8 discloses the subject matter of claims 1-16, i.e. the identification of five phytosterols as claimed from Aloe vera gel as anti-diabetic compounds. This document is particularly relevant for the issue of novelty because the compounds B11 and B12 disclosed therein as the most active anti-diabetic phytosterols isolated from aloe vera and tested are respectively 9,19-cyclolanostan-3-ol (B11) or 24-methylene-9,19-cyclolanostan-3-ol (B12) (Cf. fig. 4, fig. 5).
- 1.8 D9 discloses the subject matter of claims 1-19, i.e. that two different components were separated from Aloe arborescens var. natalensis Berger (Kidachi aloe in Japanese), which exhibit hypoglycaemic activity in spontaneously diabetic mice and normal mice. One component was separated from the succulent layer of the Aloe leaf (leaf pulp).
- 2 Should the applicant overcome the above raised objections of lack of novelty, an inventive step has to be demonstrated over D1-D4, D6-D9, as the present claimed subject matter, as far as novel, appears to be obvious over said documents (Art. 56 EPC). The person skilled in the art when confronted with the problem of improving hyperglycemia would use 9,19-cyclolanostan-3-ol or 24-methylene-9,19-cyclolanostan-3-ol in isolated form or as a plant extract or food or beverage, without exercising inventive skills.
- 3 At least some of the objections raised above are such that there appears to be no possibility of overcoming them by amendment. Refusal of the application under Article 97(2) EPC is therefore to be expected.

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	AKINMOLADUN AFOLABI C ET AL: "Effect of Aloe barbadensis on the lipid profile and fasting blood sugar concentration of rabbits fed high cholesterol diet" GLOBAL JOURNAL OF PURE AND APPLIED SCIENCES, GLOBAL JOURNAL SERIES, NG, vol. 10, no. 1, 1 January 2004 (2004-01-01), pages 139-142, XP008122818 ISSN: 1118-0579 * the whole document *	1-19	INV. A61K31/575 A23L1/30 A61K36/18 A61P3/10 C07J53/00
X	----- DATABASE MEDLINE [Online] US NATIONAL LIBRARY OF MEDICINE (NLM), BETHESDA, MD, US; August 1985 (1985-08), AGARWAL O P: "Prevention of atheromatous heart disease." XP002587669 Database accession no. NLM2864002 * abstract *	1-19	
X	& ANGIOLOGY AUG 1985 LNKD- PUBMED:2864002, vol. 36, no. 8, August 1985 (1985-08), pages 485-492, ISSN: 0003-3197	1-19	TECHNICAL FIELDS SEARCHED (IPC) A61K
X	----- DATABASE WPI Week 200426 Thomson Scientific, London, GB; AN 2004-270434 XP002587670 & CN 1 468 607 A (SONG Y) 21 January 2004 (2004-01-21) * abstract *	1-19	
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The supplementary search report has been based on the last set of claims valid and available at the start of the search.			
1	Place of search The Hague	Date of completion of the search 17 June 2010	Examiner Jakobs, Andreas
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ----- & : member of the same patent family, corresponding document	

DOCUMENTS CONSIDERED TO BE RELEVANT			
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X	MASCOLO NICOLA ET AL: "Healing powers of aloes" MEDICINAL AND AROMATIC PLANTS--INDUSTRIAL PROFILES, CRC PRESS, GB, vol. 38, 1 January 2004 (2004-01-01), pages 209-238, XP008122820 ISSN: 1027-4502 * abstract * * page 221, paragraph 4 - page 222, paragraph 2; table 9.1; 9.3; 9.4; 9.5 *	1-19	
X,P	JP 2005 068132 A (ENKAKU IRYO KENKYUSHO KK) 17 March 2005 (2005-03-17) * the whole document *	1-6, 8-13, 15-19	
X	"Appiraka Chendooram" KEY ATTRIBUTES OF THDL,, 1 January 1879 (1879-01-01), pages 1-3, XP007913282 * the whole document *	1-19	TECHNICAL FIELDS SEARCHED (IPC)
X	"Nuskha-e-zulal" KEY ATTRIBUTES OF TKDL,, 1 January 1899 (1899-01-01), pages 1-2, XP007913278 * the whole document *	1-19	
T	TANAKA MIYUKI ET AL: "Identification of five phytosterols from Aloe vera gel as anti-diabetic compounds." BIOLOGICAL & PHARMACEUTICAL BULLETIN JUL 2006 LNKD- PUBMED:16819181, vol. 29, no. 7, July 2006 (2006-07), pages 1418-1422, XP002587671 ISSN: 0918-6158 * the whole document *	1-19	
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The supplementary search report has been based on the last set of claims valid and available at the start of the search.			
Place of search The Hague		Date of completion of the search 17 June 2010	Examiner Jakobs, Andreas
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document</p>			

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EPO FORM 1503 03.82 (P04C04)

**SUPPLEMENTARY
EUROPEAN SEARCH REPORT**

Application Number
EP 05 72 7328

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	<p>BEPPU H ET AL: "Hypoglycaemic and antidiabetic effects in mice of Aloe arborescens Miller var. natalensis Berger" PHYTOTHERAPY RESEARCH 1993 GB, vol. 7, no. SPEC. ISS., 1993, pages S37-S42, XP002587672 ISSN: 0951-418X * the whole document *</p> <p style="text-align: center;">-----</p>	1-19	
			TECHNICAL FIELDS SEARCHED (IPC)
The supplementary search report has been based on the last set of claims valid and available at the start of the search.			
Place of search		Date of completion of the search	Examiner
The Hague		17 June 2010	Jakobs, Andreas
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document</p>			

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EPO FORM 1503 03 82 (P04C04)

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 05 72 7328

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

17-06-2010

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
CN 1468607	A	21-01-2004	NONE	

JP 2005068132	A	17-03-2005	NONE	
