

21-11-09

EP 1998127

Datum
Date
Date

cf Form 1507

Blatt
Sheet
Feuille

1

Anmelde-Nr.
Application No.
Demande n°

07 735 265.6

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

Description, Pages

1-22 as published

Claims, Numbers

1-15 filed with entry into the regional phase before the EPO

1 The following documents may be referred to in accordance with the international and supplementary search reports

- D1: DAS K C ET AL: "Antifungal activity of some constituents of *Murraya koenigii* Spreng." EXPERIENTIA 15 JUN 1965, vol. 21, no. 6, 15 June 1965 (1965-06-15), page 340, XP002553162 ISSN: 0014-4754
- D2: DESHMUKH S K ET AL: "A NOTE ON MYCOTOXICITY OF SOME ESSENTIAL OILS" FITOTERAPIA, IDB HOLDING, MILAN, IT, vol. 57, no. 4, 1, January 1986 (1986-01-01), pages 295-297, XP008083437 ISSN: 0367-326X
- D3: DATABASE TKDL GP01/186 1979, "Parangipatti Chooranam" XP002553164
- D4: BHATTACHARYYA P ET AL: "2 METHOXY-3-METHYLCARBAZOLE FROM MURRAYA-KOENIGII" INDIAN JOURNAL OF CHEMISTRY SECTION B ORGANIC CHEMISTRY INCLUDING MEDICINAL CHEMISTRY, vol. 24, no. 4, 1985, page 452, ISSN: 0376-4699
- D5: JP 2005 113842 A
- D6: JP 07 157420 A
- D7: US-B2-6 759 033

2 The amendments comply with the requirements of A.123(2) EPC on the basis of indications in the manuscript copy.

3 Novelty (A.54(1)(2) EPC)/ Inventive Step (A.56 EPC).

- 3.1 The subject matter of claim 1 is not new (A.54(1)(2)) over the prior art D1 to D3 which all make available extracts from *Murraya koenigii* for use against dermatophyte infection. The remaining subject matter is either not new (A.54(1)(2)) or inventive (A.56 EPC) over said prior art as the claimed features are also disclosed, either explicitly or intrinsically, or may be arrived at without involving an inventive step as being routine design alternatives when treating dermatophyte infections. The applicant is further reminded that the existence of the claimed active compound in *Murraya koenigii* extracts is known from D4.

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	DAS K C ET AL: "Antifungal activity of some constituents of <i>Murraya koenigii</i> Spreng." EXPERIENTIA 15 JUN 1965, vol. 21, no. 6, 15 June 1965 (1965-06-15), page 340, XP002553162 ISSN: 0014-4754 * the whole document *	1-15	INV. A61F9/00
X	DESHMUKH S K ET AL: "A NOTE ON MYCOTOXICITY OF SOME ESSENTIAL OILS" FITOTERAPIA, vol. 57, no. 4, 1 January 1986 (1986-01-01), pages 295-297, XP008083437 IDB HOLDING, MILAN, IT ISSN: 0367-326X * the whole document *	1-15	
X	DATABASE TKDL [Online] 1979, "Parangipatti Chooranam" XP002553164 retrieved from TKDL Database accession no. GP01/186 * abstract *	1-15	TECHNICAL FIELDS SEARCHED (IPC) A61K
A	8HATTACHARYYA P ET AL: "2 METHOXY-3-METHYLCARBAZOLE FROM MURRAYA-KOENIGII" INDIAN JOURNAL OF CHEMISTRY SECTION B ORGANIC CHEMISTRY INCLUDING MEDICINAL CHEMISTRY, vol. 24, no. 4, 1985, page 452, XP008114222 ISSN: 0376-4699 * the whole document *	1-15	
The supplementary search report has been based on the last set of claims valid and available at the start of the search.			
4	Place of search The Hague	Date of completion of the search 2 November 2009	Examiner Maddox, Andrew
CATEGORY OF CITED DOCUMENTS		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	
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			

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	DAS K C ET AL: "Antifungal activity of some constituents of <i>Murraya koenigii</i> Spreng." EXPERIENTIA 15 JUN 1965, vol. 21, no. 6, 15 June 1965 (1965-06-15), page 340, XP002553162 ISSN: 0014-4754 * the whole document *	1-15	INV. A61F9/00
X	DESHMUKH S K ET AL: "A NOTE ON MYCOTOXICITY OF SOME ESSENTIAL OILS" FITOTERAPIA, vol. 57, no. 4, 1 January 1986 (1986-01-01), pages 295-297, XP008083437 IDB HOLDING, MILAN, IT ISSN: 0367-326X * the whole document *	1-15	
X	DATABASE TKDL [Online] 1979, "Parangipatti Chooranam" XP002553164 retrieved from TKDL Database accession no. GP01/186 * abstract *	1-15	TECHNICAL FIELDS SEARCHED (IPC) A61K
A	BHATTACHARYYA P ET AL: "2 METHOXY-3-METHYLCARBAZOLE FROM MURRAYA-KOENIGII" INDIAN JOURNAL OF CHEMISTRY SECTION B ORGANIC CHEMISTRY INCLUDING MEDICINAL CHEMISTRY, vol. 24, no. 4, 1985, page 452, XP008114222 ISSN: 0376-4699 * the whole document *	1-15	
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 2 November 2009	Examiner Maddox, Andrew
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 C 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 3 member of the same patent family, corresponding document	

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

Description, Pages

1-22 as published

Claims, Numbers

1-10 received on 22-07-2010 with letter of 21-07-2010

- 1 The amendments are allowable under A.123(2) EPC, the basis is evident from the marked up copy.
- 2 For novelty it should be noted that the conditions of A.54(4)(5)EPC do not apply as the use is not limited to those excluded by A. 53(c). Hence the claims can be treated as composition claims.
- 3 **The novelty objections are maintained for D1 through D3 as no distinguishing feature of root extracts are included. In D1 and D2 the same dermatophytes are mentioned. In addition to answer the submissions regarding D3, the claims are not limited to solely Murraya extracts as the claims are drafted in the comprising form. It** also becomes apparent that the compositions of D4, being the active component mentioned in current claim 5, also fall within the terms of the claims and also exclude novelty for the same reasons.
- 3.1 Furthermore in view of point 2 supra and without prejudice to point 3, both D8 and D9 describe root compositions which can also be considered as novelty destroying for claim 1.
- 4 For any novel subject matter the inventive step arguments are upheld. Assuming the claim formulation were adjusted to conform with A.54(4)(5) EPC it would be wrong to dismiss documents D1 and D2 merely because no human or animal subject is treated. Clearly it is the intention of these documents to provide compositions for treating infections with the claimed dermatophytes in human or animals. It would in any case certainly be plain and logical to do so. The only question that may arise if the claims were to

include root components, is whether such compositions were also envisaged. However as explained before in 3.3.1 of the previous communication this feature appears to have no technical effect and merely represent an arbitrary choice when attempting to solve the problem of providing different explant sources for the Murraya composition.

- 5 Amendments complying with A.123(2) EPC are invited to overcome the deficiencies raised herein. Failing this refusal of the application pursuant to A.97(2) EPC is contemplated.

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

Description, Pages

1-22 as published

Claims, Numbers

1-8 filed in electronic form on 24-09-2012

- 1 The amended claims meet the requirements of A.123(2) EPC. The basis is evident from the marked up copy of the claims.
- 2 The objection to a lack of inventive step is maintained. D1, D2 or D3 can each independently represent the closest prior art, as methods for treating tinea infections with the claimed micro-organisms.
- 2.1 In so far as the root extract is considered as a distinguishing characteristic of the claim this is the difference with respect to the prior art. Thi does not appear to have any effect on the ability to treat tinea
- 2.2 The problem is to provide alternative *Murraya koenigii* formulations for treating tinea.
- 2.3 The solution is use root extract and is embodied in claim1. The applicant alleges that the activity of the extract is surprisingly higher then the prior art. However this may be merely a result of the particular extraction process or be an intrinsic feature of the concentrations of inhibitory compounds in the roots.
- 2.4 As such the documents D8 and D9 point to the root as a source of inhibitory compounds which are known to include carbazoles. In the light of these documents the skilled person would realise the utility of root extracts as an alternative to those of the closest prior art. The additional activity of any is merely a bonus effect and an inherent feature of the root extracts.

- 2.5 Hence the skilled person would arrive at something falling within the terms of the claims following on plainly and logically from the prior art. Hence the subject matter of claim 1 lacks an inventive step. The features of the remaining claims are routine design alternatives which hence also lack inventive merit. The requirements of A.56 EPC have not been met.
- 3 The applicant is invited to rectify the deficiencies by way of amendment. Failure to do so will ultimately lead to refusal of the application pursuant to A.97(2) EPC.