Title: ANTIOXIDENT SUBSTITUTED COFFEE

Abstract:
This coffee is derived from the plant namely spermacoce hispida. The seeds are roasted in the low temperature and powdered mechanically.

The I.R. caffeine and the I.R. of spermacoca hispida are similar in nature.

Micro Analysis report reveals that the powder contains caffeine and some other compounds. This sample was identified by comparing the standard caffeine. The result shows that there is an excellent agreement in the number of specific bands of both spectra. The similarity of the shapes of the spectra can be justified by visual comparing the both spectra. The crystal is thus identified as caffeine.

NUCLEAR MAGNETIC RESONANCE MEASURMENTS:-

The NMR spectrum of the isolated caffeine shows that there is almost same profile as that of the standard caffeine except for the shift. HNMR of the isolated caffeine shows a chemical shift. The chemical shift value of three different protons which are attached in nitrogen with different chemical environment each H2 should give a singlet peak.

Identification of methyl groups contain in caffeine after comparing the chemical shift values of both, I came to know that the 11th and 12th methyl group are attached in the caffeine structure. The 10th methyl group carbon atom would have substituted with other atom and not proton of caffeine. If caffeine is not found in the sample, you never see the chemical shift value of proton belonging to-the methyl group, which is heavier to the standard caffeine sample. The other peaks and triplets are due the impurity peaks. In this way the NMR measurements confirmed that the crystal was caffeine.

Micro Analysis report says that the sample contains 4% of Nitrogen 42.32% of carbon and 5.8% of Hydrogen etc. Total in about 52.24%. Nearly 48% of other elements also there, Metals as impurities.

The percentage of total antioxidant activity was estimated as 48.83 at 1000 pg/ml.
The percentage of total antioxidant activity of methanolic extract of Borreria hispida exhibited a maximum total antioxidant activity 84.76% at 1000 µg/ml.

This substance can be used in cancer for the curative purpose. (Anti-cancerous property)

Spermacoce hispida coffee powder contains 6% Moisture, 18.6% Crude fiber content, 6.2% Acid Insoluble ash, 0.9% total ash, chromium is not found.
CLAIMS

I claim.

1. This Antioxidant coffee (Spermacoce hispida) shall not be reproduced in any other form from this plant or any other species of this plant (from the seeds).

2. Any derivative in the form of Coffee or the related substance or any other modification in the form of coffee or any other beverages shall be prohibited.

3. This Antioxidant coffee shall not be used for the purpose of adding flavors to any other products or mixed with another other existing branded coffee/beverages.

S. Mohana Selvan
Antioxidant Coffee (spermacoce hispida)

Caffeine

1.616 ppm
2.195 ppm

S. Mohana Selvan
PATENT COOPERATION TREATY

PCT

DECLARATION OF NON-ESTABLISHMENT OF INTERNATIONAL SEARCH REPORT

(PCT Article 17(2)(a), Rules 13 ter. 1(c) and 39)

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<thead>
<tr>
<th>Applicant's agent's reference</th>
<th>IMPORTANT DECLARATION</th>
<th>Date of mailing (day/month/year)</th>
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<tr>
<th>International application No.</th>
<th>International filing date (day/month/year)</th>
<th>(Earliest) Priority date (day/month/year)</th>
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International Patent Classification (IPC) or both national classification and IPC

C07D 473/12 (2006.01)i

Applicant

S. MOHANA SELVAN

This International Searching Authority hereby declares, according to Article 17(2)(a), that no international search report will be established on the international application for the reasons indicated below.

1. ☐ The subject matter of the international application relates to:
   a. ☐ scientific theories
   b. ☐ mathematical theories
   c. ☐ plant varieties
   d. ☐ animal varieties
   e. ☐ essentially biological processes for the production of plants and animals, other than microbiological processes and the products of such processes
   f. ☐ schemes, rules or methods of doing business
   g. ☐ schemes, rules or methods of performing purely mental acts
   h. ☐ schemes, rules or methods of playing games
   i. ☐ methods for treatment of the human body by surgery or therapy
   j. ☐ methods for treatment of the animal body by surgery or therapy
   k. ☐ diagnostic methods practised on the human or animal body
   l. ☐ mere presentations of information
   m. ☐ computer programs for which this International Searching Authority is not equipped to search prior art

2. ☑ The failure of the following parts of the international application to comply with prescribed requirements prevents a meaningful search from being carried out:
   ☐ the description (☐ the claims ☑ the drawings)

3. ☐ A meaningful search could not be carried out without the sequence listing; the applicant did not, within the prescribed time limit:
   ☑ furnish a sequence listing on paper complying with the standard provided for in Annex C of the Administrative Instructions, and such listing was not available to the International Searching Authority in a form and manner acceptable to it.
   ☑ furnish a sequence listing in electronic form complying with the standard provided for in Annex C of the Administrative Instructions, and such listing was not available to the International Searching Authority in a form and manner acceptable to it.
   ☑ pay the required late furnishing fee for the furnishing of a sequence listing in response to an invitation under Rule 13 ter. 1(a) or (b).

4. Further comments:
   See extra sheet

Name and mailing address of the ISA/CN

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Form PCT/ISA/203 (July 2009)
DECLARATION OF NON-ESTABLISHMENT OF INTERNATIONAL
SEARCH REPORT

International application No. PCT/IN20 10/000590

Continuation of: 4. Further comments:

Claims 1-3 and the description are so unclear that no meaningful search can be established and the detailed reasons are as follows:

Claims 1-3 relates to "This antioxidant coffee (Spermacoe hispida) shall not be reproduced in any other form from this plant or any other species of this plant (from the seeds)", "Any derivative in the form of Coffee or the related substance or any other modification in the form of coffee or any other beverages shall be prohibited", "This antioxidant coffee shall not be used for the purpose of adding flavors to any other products or mixed with another other existing branded coffee/beverages", which are unclear to such an extent that a skilled person can not know the subject-matter claimed.

There is no reasonable basis in the description that clearly indicates the subject-matter which might be expected to form the subject of the claims later in the procedure. Because the description contains the substances of caffeine crystal, methanolic extract and coffee powder, which are antioxidant or anticancer and in view of the drafting of the claims an expected fall back position could not be determined.