

## **Patents**

- 1. Development of Nutritional whey based sweet lime beverage (whey-lime) using high pressure processing**
- 2. A pressure processed nutritionally fortified vitamin D kiwi whey beverage composition**
- 3. Novel media for plant tissue culture**
- 4. Anti-viral, anti-bacterial immune-boosting composition of herbal extracts on synergistic ratio**
- 5. Nano functionalised natural fibre with improved photocatalytic and antimicrobial properties**





**INTELLECTUAL  
PROPERTY INDIA**  
PATENTS | DESIGNS | TRADE MARKS  
GEOGRAPHICAL INDICATIONS



भारत सरकार  
GOVERNMENT OF INDIA  
पेटेंट कार्यालय  
THE PATENT OFFICE  
पेटेंट प्रमाणपत्र  
PATENT CERTIFICATE  
(Rule 74 of The Patents Rules)

क्रमांक : 01146273  
SL No :



पेटेंट सं. / Patent No. : 398150  
 आवेदन सं. / Application No. : 201711039578  
 दाखल करने की तारीख / Date of Filing : 07/11/2017  
 पेटेंटी / Patentee : CENTER OF INNOVATIVE AND APPLIED  
 BIOPROCESSING

प्रमाणित किया जाता है कि पेटेंटी को, उपरोक्त आवेदन में उपाखण्डित DEVELOPMENT OF NUTRITIONAL WHEY-BASED SWEET LIME BEVERAGE (WHEY-LIME) USING HIGH PRESSURE PROCESSING नामक आविष्कार के लिए, पेटेंट अधिनियम, 1970 के उपबंधों के अनुसार आज तारीख नवम्बर 2017 के सातवें दिन से बीस वर्ष की अवधि के लिए, पेटेंट अनुदान किया गया है।

It is hereby certified that a patent has been granted to the patentee for an invention entitled DEVELOPMENT OF NUTRITIONAL WHEY-BASED SWEET LIME BEVERAGE (WHEY-LIME) USING HIGH PRESSURE PROCESSING as disclosed in the above mentioned application for the term of 20 years from the 7<sup>th</sup> day of November 2017 in accordance with the provisions of the Patents Act,1970.

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अनुदान की तारीख : 04/05/2022  
Date of Grant :

Controller of Patent

**ध्यान** - इस पेटेंट के नवीकरण के लिए फीस, यदि इसे बनाए रखा जाए है, नवम्बर 2019 के सातवें दिन से और उसके पचास वर्षों के 7<sup>वें</sup> दिन से शुरू होगी।  
 Note - The fees for renewal of this patent, if it is to be maintained will fall / has fallen due on 7<sup>th</sup> day of November 2019 and on the same day in every year thereafter.

**Development of Nutritional Whey based Sweet Lime Beverage (Whey-Lime) Using High Pressure Processing**



Office of the Controller General of Patents, Designs & Trade Marks  
Department of Industrial Policy & Promotion,  
Ministry of Commerce & Industry,  
Government of India



#### Application Details

APPLICATION NUMBER	202011037941
APPLICATION TYPE	ORDINARY APPLICATION
DATE OF FILING	03/09/2020
APPLICANT NAME	Dr Vasudha Bansal
TITLE OF INVENTION	A PRESSURE PROCESSED NUTRITIONALLY FORTIFIED VITAMIN D KIVI WHEY BEVERAGE COMPOSITION
FIELD OF INVENTION	FOOD
E-MAIL (As Per Record)	iprstudio11@gmail.com
ADDITIONAL-EMAIL (As Per Record)	
E-MAIL (UPDATED Online)	
PRIORITY DATE	
REQUEST FOR EXAMINATION DATE	03/09/2020
PUBLICATION DATE (U/S 11A)	25/09/2020

#### Application Status

APPLICATION STATUS	Application Awaiting Examination
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[View Documents](#)



In case of any discrepancy in status, kindly contact [ipo-helpdesk@nic.in](mailto:ipo-helpdesk@nic.in)

**A Pressure Processed Nutritionally Fortified Vitamin D Kiwi Whey Beverage Composition**



Patent granted  
dt. 17/12/2010



क्रमांक : 011120966  
SL No :



भारत सरकार  
GOVERNMENT OF INDIA  
पेटेंट कार्यालय  
THE PATENT OFFICE  
पेटेंट प्रमाणपत्र  
PATENT CERTIFICATE  
(Rule 74 of The Patents Rules)

पेटेंट सं. / Patent No.	353027
आवेदन सं. / Application No.	1113/DEL/2009
प्रकाश करने की तारीख / Date of Filing	01/06/2009
पेटेंटी / Patentee	1. BISWAS KAKOLI 2. BISWAS RAJESH

प्रमाणित किया जाता है कि पेटेंटी को उपरोक्त आवेदन में वर्णनकृत NOVEL MEDIA FOR PLANT TISSUE CULTURE नामक आविष्कार के लिए, पेटेंट अधिनियम, 1970 के उपबंधों के अनुसार आज तारीख 1st day of June 2009 से बीस वर्ष की अवधि के लिए पेटेंट अंगुलत किया गया है।

It is hereby certified that a patent has been granted to the patentee for an invention entitled NOVEL MEDIA FOR PLANT TISSUE CULTURE as disclosed in the above mentioned application for the term of 20 years from the 1st day of June 2009 in accordance with the provisions of the Patents Act, 1970.



प्रदान की तारीख  
Date of Grant 17/12/2010

Mr. Jitendra  
Controller of Patents

नोट - इस पेटेंट के नवीकरण के लिए शुल्क, जो कि बीस वर्ष का है, 1st day of June 2011 को और उसके तुरंत बाद हर से जसे दिन के होते हैं।  
Note - The fees for renewal of this patent, if it is to be maintained will fall / has fallen due on 1st day of June 2011 and on the same day in every year thereafter.

Novel Media for Plant Tissue Culture

NR/10

अन्वेषण रिपोर्ट / Examination Report

अन्वेषण संख्या / Application Number	202011016798
अन्वेषण रिपोर्ट दिनांक / Date of Filing	19/04/2020
अन्वेषण संख्या / Date of Priority	
अन्वेषण संख्या / अन्वेषण संख्या / PCT International Application No. & Date	
अन्वेषक / Applicant	DR. RAJESH BRSWAG
अन्वेषण के लिए अन्वेषण संख्या / Request for Examination No. & Date	E2021101287012/04/2021
अन्वेषण दिनांक / Date of Publication	19/04/2020

यह अन्वेषण रिपोर्ट चार भागों में है, अर्थात् संक्षेप, विस्तृत अन्वेषण रिपोर्ट, विस्तृत अन्वेषण रिपोर्ट, विस्तृत अन्वेषण रिपोर्ट, विस्तृत अन्वेषण रिपोर्ट।  
 This examination report consists of four parts, namely summary of the report, detailed technical report, formal requirements and documents on record.

भाग-1: रिपोर्ट का संक्षेप  
 PART-I: SUMMARY OF THE REPORT

क्र. सं. / S.N.	अन्वेषण के लिए अन्वेषण संख्या / Requirements under the Act	अन्वेषण संख्या / Claim Numbers	उत्तर / Remarks
1.	अन्वेषण संख्या / अन्वेषण संख्या / Invention's inventive step (1)(i)	अन्वेषण संख्या / Claims: 1-3	अन्वेषण संख्या / Yes/No
2.	अन्वेषण संख्या / अन्वेषण संख्या / Non-patentability (1)(ii) (if yes, specify section 3(a-p))	अन्वेषण संख्या / Claims: 1-3	अन्वेषण संख्या / Yes/No
3.	अन्वेषण संख्या / अन्वेषण संख्या / Defective (1)(5) & 1(4) (c)	अन्वेषण संख्या / Claims: 1-3	अन्वेषण संख्या / Yes/No

भाग-2: विस्तृत अन्वेषण रिपोर्ट  
 PART-II: DETAILED TECHNICAL REPORT

अन्वेषण के लिए अन्वेषण संख्या / A List of documents cited:  
 (a) अन्वेषण संख्या / (a) Patent Literature:

क्र. सं. / S.No.	अन्वेषण संख्या / Details of documents	अन्वेषण संख्या / Publication date	अन्वेषण संख्या / Relevant description (page and paragraph no.) of cited document	अन्वेषण संख्या / Relevant claims of cited document	अन्वेषण संख्या / Claims of alleged invention
1.	DR: WO2017007833A1	12/01/2017	Whole Document		1-3

(अ) अन्वेषण संख्या / (b) Non-patent literature

क्र. सं. / S.No.	अन्वेषण संख्या / Details of documents	अन्वेषण संख्या / Publication date	अन्वेषण संख्या / Relevant description (page and paragraph no.) of cited document	अन्वेषण संख्या / Relevant claims of cited document	अन्वेषण संख्या / Claims of alleged invention

**National: Anti-viral, Anti-bacterial Immuno Boosting Composition of Herbal Extracts on Synergistic Ratio**

*INTERNATIONAL Patent filed Application dt. - 19.05.2022*  
*Antiviral*  
*Anti-VIRAL ANTI-BACTERIAL Immuno-boosting composition of Herbal Extracts on Synergistic Ratio.*

**PATENT COOPERATION TREATY**  
From the INTERNATIONAL SEARCHING AUTHORITY

**PCT**

NOTIFICATION OF TRANSMITTAL OF THE INTERNATIONAL SEARCH REPORT AND THE WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY OF THE DECLARATION

PCT Rule 91.01

To: BISMAS, DR. RAJESH, BISMAS, DR. KAKOLI, and others, BANSAL, KMPAL, BANSAL 1F ASSOCIATES, F-213, 4TH FLOOR, INDUSTRIAL AREA, PHASE 8B, PUNJAB, MOHALI-160055 INDIA	Date of mailing (International phase): 14-05-2022
Applicant's or agent's address for service: P527-PCT-01 PCT/IN2020/010448	FOR FURTHER ACTION (see paragraphs 1 and 4 below) International filing date (International phase): 19-05-2020
Applicant: BISMAS, DR. RAJESH, BISMAS, DR. KAKOLI, and others.	

The applicant is hereby notified that the international search report and the written opinion of the International Searching Authority have been established and are transmitted herewith.

**Filing of amendments and request under Article 19**  
The applicant is invited, if he so wishes, to amend the claim of the international application (see from 40).  
**When?** The time limit for filing such amendments is normally two months from the date of transmittal of the international search report.  
**How?** Directly to the International Bureau preferably through PCT, or via paper to the International Bureau (Article 17, Annex to the Charter, 12.1) Geneva, CH, Switzerland.

**For more detailed instructions, see the PCT Applicant's Guide, International Phase, paragraphs 9.04 - 9.41.**

The applicant is hereby notified that no international search report will be established and that the decision under Article 17(2)(b) in that effect and the written opinion of the International Searching Authority are transmitted herewith.

With regard to any previous request for payment of two additional fees under Rule 91.2, the applicant is invited to:

- be treated together with the declaration that has been transmitted to the International Bureau together with any request to demand the state or to ask the patent and the business method or the designated Office;
- no decision has been made, not in the present, the applicant will be notified as soon as a decision is made.

**1. Summary**  
The applicant may submit comments on or referred back on the written opinion of the International Searching Authority to the International Bureau. These comments will be made available to the public after international publication. The International Bureau will send a copy of such comments to all designated Offices, subject to international preliminary examination in respect hereto as to be notified.

Generally, after the expiration of 18 months from the priority date, the international application will be published by the International Bureau. When applicant wishes to avoid or postpone publication, a request for withdrawal of the international application or of the priority claim, must reach the International Bureau before the completion of the technical preparation for international publication (PCT Rules 91.01 and 91.02).

Within 18 months from the priority date, but only in respect of some designated Offices, a demand for international preliminary examination may be filed if the applicant wishes to postpone the entry into the national phase until 30 months from the priority date (see Annex 1B to the present Treaty). Otherwise, the applicant must, within 30 months from the priority date, notify the prior art which he or she knows the national phase before those designated Offices. In respect of other designated Offices, the time limit of 30 months (or such) will apply even if no demand is filed within 18 months. For details about the applicable time limits, Office of Origin see www.wipo.int/pct/phase.htm. Article 19(1) and the PCT Applicant's Guide, National Chapter.

Within 12 months from the priority date, the applicant may request that a complementary international search be carried out by a different International Searching Authority that offers his services (Article 19). The procedure for requesting complementary international search is described in the PCT Applicant's Guide, International Phase, paragraphs 9.06-9.11.

Authorised mailing address of the ISA: Indian Patent Office, P230 No. 11, Sector 14, Gurgaon, New Delhi-122002, India From PCT/IN/2020/010448, dated 19 May 2022	Authorized officer: Trishala Verma Telephone No. +91-1125302100
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**International: Anti-viral, Anti-bacterial Immuno Boosting Composition of Herbal Extracts on Synergistic Ratio**

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202011003954 A

(19) INDIA

(22) Date of filing of Application :29/01/2020

(43) Publication Date : 27/08/2021

(54) Title of the invention : NANO-FUNCTIONALIZED NATURAL FIBER WITH IMPROVED PHOTOCATALYTIC AND ANTIMICROBIAL PROPERTIES

(51) International classification	:B65D0065460000, A61L0027300000, B01J0035000000, C01G0009020000, D06M0016000000	(71)Name of Applicant : 1)Panjab University Address of Applicant :Sector 14, Chandigarh, Pin- 160014 Chandigarh India
(31) Priority Document No	:NA	(72)Name of Inventor : 1)Ganga Ram Chaudhary
(32) Priority Date	:NA	2)Moondeep Chauhan
(33) Name of priority country	:NA	3)Bunty Sharma
(86) International Application No	:NA	4)Preeti Alag
Filing Date	:NA	5)Gurpreet Kaur
(87) International Publication No	:NA	6)Rajeev Kumar
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention relates to a bionanocomposite material comprising a natural fiber (NF) on which metal oxide nanostructures are grown. More specifically, invention relates to fabrication of a scalable array platform consisting of metal oxide nanostructures grown onto the natural fibres extracted from plants of species Sanevieria. The bionanocomposite or metal oxide nanostructures based bio-platform of the present invention are highly suitable for degradation and removal of contaminants found in air, water and other liquids. Thus, the bionanocomposites of the present invention are ideal candidates for construction of materials which can be used in variety of applications such as air purification, water cleansing, biomedical application, flexible and portable electronic gadgets, smart textiles, etc. The invention also relates to a process for preparing the bionanocomposite and textile product formed thereof.

18  
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No. of Pages : 33 No. of Claims : 14

## Nano Functionalized Natural Fiber with improved Photocatalytic and Anti microbial Properties