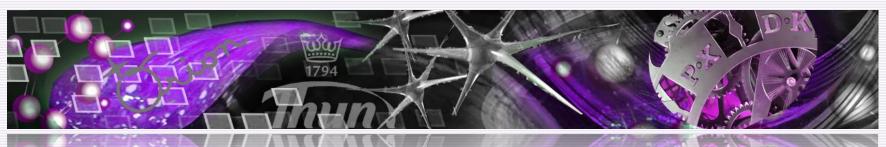


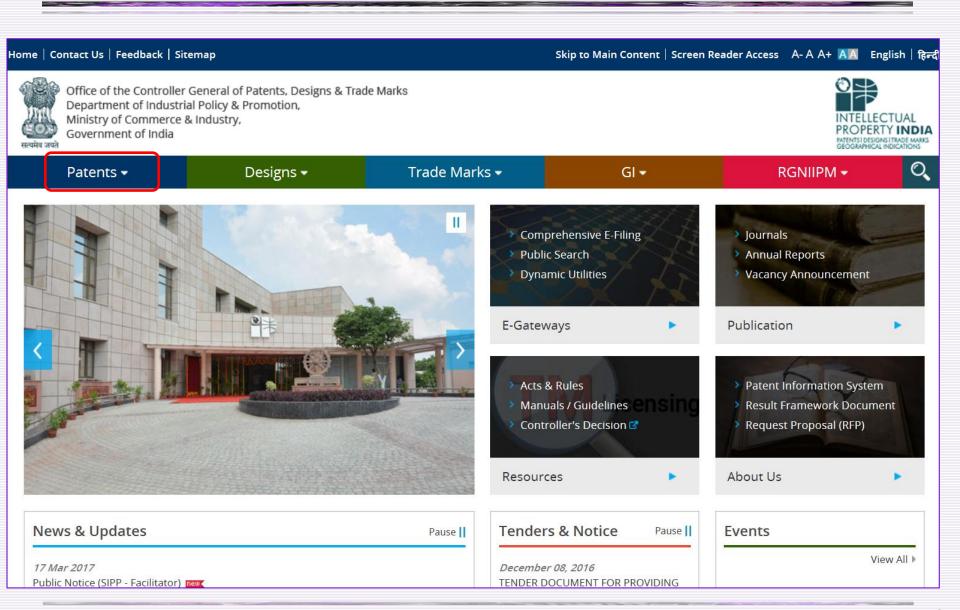
Office of the Controller General of Patents, Designs & Trade Marks Department of Industrial Policy & Promotion, Ministry of Commerce & Industry, Government of India

IP INDIA

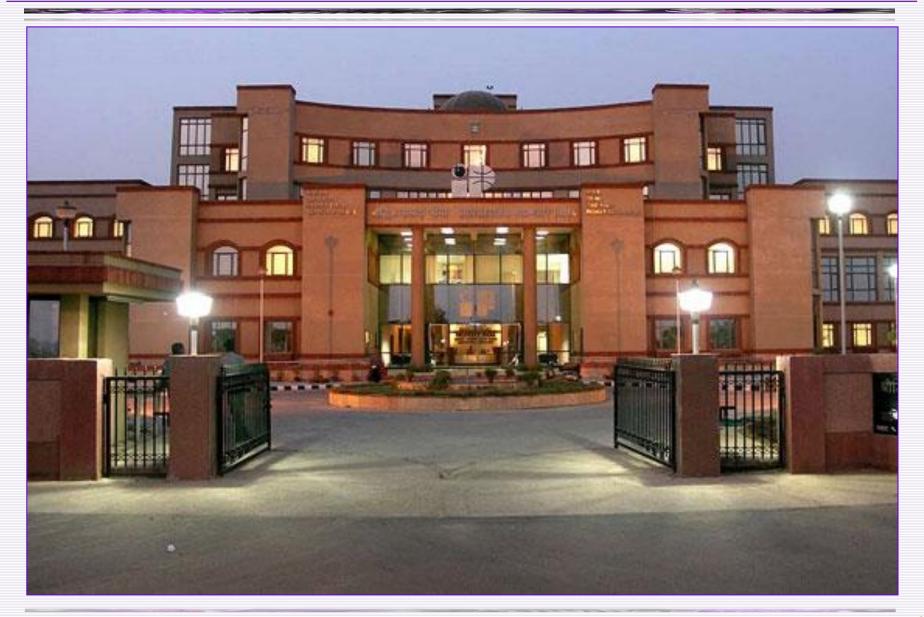


Brno, 2017









Historie IPO

- -1856 první právní ochrana patentů v Indii založená na britském patentovém zákoně
- -1872 ochrana průmyslových vzorů
- -1911 Indický zákon o patentech a průmyslových vzorech
- -1949 kompletní revize patentového zákona, aby odpovídal národním zájmům Indie
- -Postupný vývoj právní úpravy, poslední změna v r. 2006.

Organizační struktura

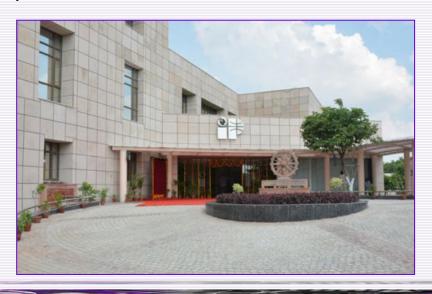
- 1. Ministry of Commerce and Industry
- 2. Office of the Controller General of Patents, Designs and Trademarks
- <u>The Patent Office</u> (vč. Designu) Kalkata, Delhi, Mumbai, Chennai (samostatná územní příslušnost)

The Trademark Registry - Kalkata, Delhi, Mumbai, Chennai, Ahmadabad The Geographical Indication Registry – Chennai

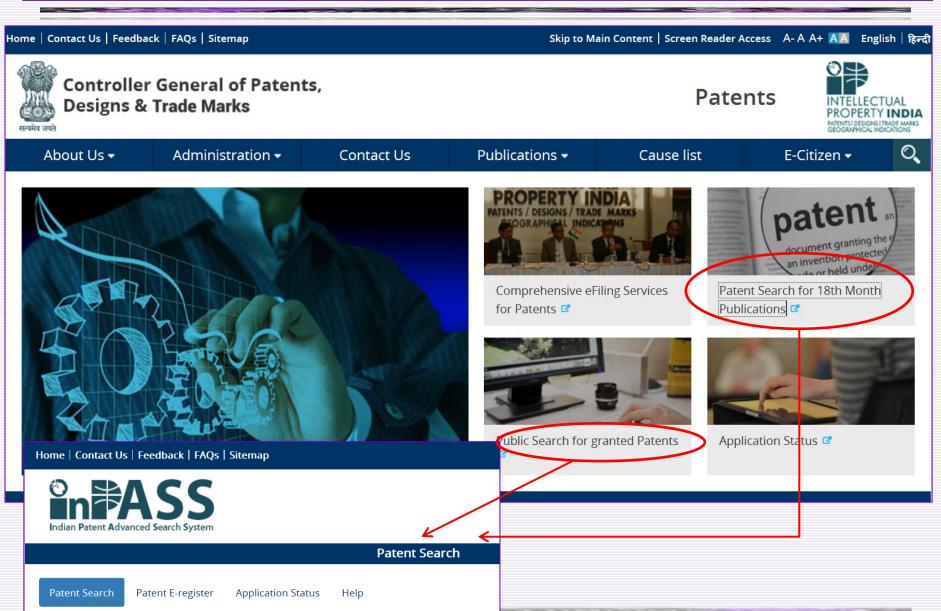
- 3. National Institute of Intellectual Property Management Nagpur
- 4. Patent Information System Nagpur



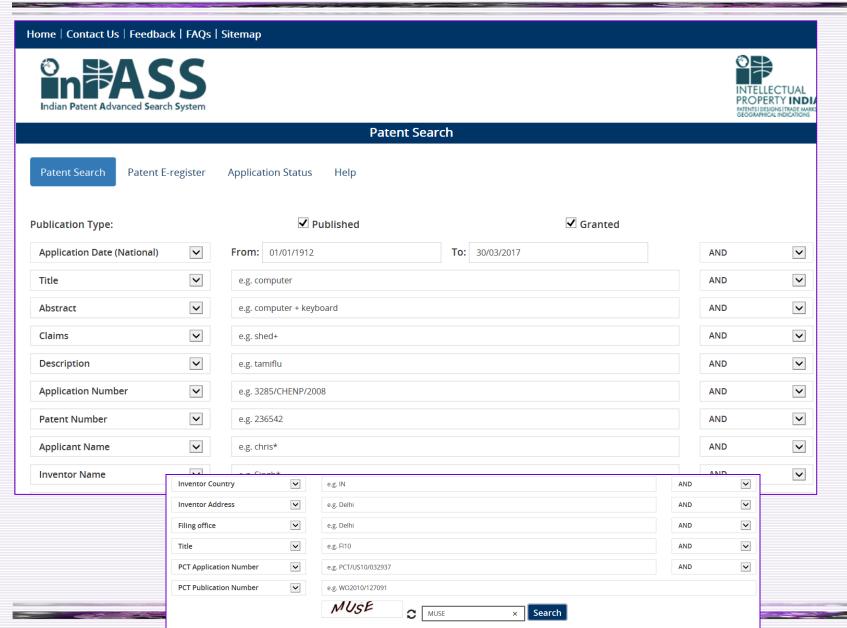
- Ochrana patentu 20 let od podání přihlášky, platí od roku 2002.
- •Od r. 1998 je Indie smluvním členem PCT-Smlouvy o patentové spolupráci
- •Zahraniční přihlašovatel vynálezu musí uvést pro komunikaci s úřadem indickou doručovací adresu autorizovaný patentový zástupce
- •Patentové přihlášky se zveřejní podle místa bydliště, sídla firmy nebo sídla patentového zástupce













Application Status Patent E-register Patent Search Help Search syntax List of operators supported in InPASS OPERATOR EXAMPLE **EXPLANATION** Boolean AND Anti AND Returns all documents that contain both the first term and the second term. bacterial OR Anti OR bacteria Returns all documents that contain either the first term or the second term or both NOT Anti NOT Returns all documents that contain the first term and not the term following NOT bacteria Wildcard Te?t Returns all documents that contain test or text. Wildcard search uses ?to search terms with one single character replaced Shed* Returns all documents that contain shed, shedding, shedder Others RAZOR^10 Blade Returns all documents in which "RAZOR" is considered to be more relevant than "blade". Boosting assigns importance values to individual query terms +/-+razor-blade Returns all documents that contain "razor" and that do not contain "blade". use(+) a query term and to prohibit use (-) one. Example search supported in public search **FIELD EXAMPLE HELPTEXT** Title Computer



Application Number	Title	Application Date	Status
201721004226	"AN ECO-FRIENDLY OR ECONOMICAL METHOD FOR LARGE SCALE MANUFACTURING OF IRON AND IRON OXIDE <i>NANOPARTICLE</i> USING EXTRACT OF LAC."	2017/02/06	Published
201617042434	CLEVIDIPINE NANOPARTICLES AND PHARMACEUTICAL COMPOSITIONS THEREOF	2016/12/13	Published
201647041936	SUPPORTED CATALYST AND METHOD FOR PRODUCING A POROUS GRAPHITIZED CARBON MATERIAL COVERED WITH METAL <i>NANOPARTICLES</i>	2016/12/08	Published
201621041883	INTRANASAL EFAVIRENZ NANOPARTICLES FOR CNS TARGETING IN NEURO-AIDS	2016/12/07	Published
201627036600	TARGETING TRASTUZUMAB RESISTANT HER2+BREAST CANCER WITH A HER3 TARGETING NANOPARTICLE	2016/10/25	Published
201641034921	STRUCTURE AND TOPOLOGY CONSERVING TRANSFORMATIONS BETWEEN TWO ARCHETYPAL NANOPARTICLES	2016/10/13	Published
201617034508	AN ULTRASOUND CLEANING METHOD WITH SUSPENDED NANOPARTICLES	2016/10/07	Published
201621034257	PROCESS OF BIOSYNTHESIS OF COPPER <i>NANOPARTICLES</i> FROM CINNAMON BARK AND THEIR USE THERE OF AS THERAPEUTIC AGENTS	2016/10/06	Published
201617032750	METHOD FOR THE SYNTHESIS OF SUPPORTED GOLD (AU) NANOPARTICLES FOR EPOXIDATION REACTIONS	2016/09/26	Published
201617032239	THERAPEUTIC <i>NANOPARTICLES</i> COMPRISING A THERAPEUTIC AGENT AND METHODS OF MAKING AND USING SAME	2016/09/21	Published
201617030140	NANOPARTICLE ENHANCED ACTIVATED CARBON FABRICS	2016/09/02	Published
201621028221	AN OPTIMIZED PROCESS FOR DIOSCOREA OPPOSITIFOLIA MEDIATED SYNTHESIS OF GOLD AND SILVER	2016/08/19	Published

Publication Type:	i a a a a a a a a a a a a a a a a a a a	☑ Published	✓ Gr	anted	
Application Date (National)	~	From: 01/01/1912	To: 31/03/2017		AND
Title	~	nanopartic*			OR V
Abstract	~	nanopartic*			AND



Application Number: 201617042434

Biblographic Data

Complete Specification Application Status

Invention Title	CLEVIDIPINE NANC	CLEVIDIPINE NANOPARTICLES AND PHARMACEUTICAL COMPOSITIONS THEREOF						
Publication Number	12/2017	2/2017						
Publication Date	2017/03/24	2017/03/24						
Publication Type	INA							
Application Number	201617042434							
Application Filing Date	2016/12/13	Name	Address	Country	Nationa			
Priority Number	U.S.A.62/000119	MOTHERAM Rajeshwar HANLEY Sr. David C.	17 Summerfield Boulevard Dayton NJ 08810 86 Whisconier Rd. Brookfield CT 06804	US US	US			
Priority Country	U.S.A.			DE DE	DE DE			
Priority Date	2014/05/19,	Applicant						
Field Of Invention	(FI11) PHARMACEU	Name Address THE MEDICINES COMPANY 8 Sylvan Way Parsippany NJ 07054		Country US	Nationalit US			
Classification (IPC)	A61K-31/442	Abstract:						
Inventor		Provided is a pharmaceutical composition comprising clevidipine in a sterile ready to use physically stable aqueous dispersion of nano clevidipine against formation of impurities and is suitable for parenteral administration.						



Biblographic Data Complete Specification Application Status PDF Document 201617042434.pdf 201617042434-Correspondence-160317.pdf **Complete Specification** 201617042434-Power of Attorney-160317.pdf abstract.jpg CLEVIDIPINE NANOPARTICLES AND PHARMACEUTICAL COMPOSITIONS THEREOF Description(Complete) [13-12-2016(online)].pdf Cross Reference to Related Applications Description(Complete) [13-12-2016(online)].pdf 23.pdf This application claims priority from U.S. Provisional Patent Application No. 62/000,1 19 Drawing [13-12-2016(online)].pdf filed on May 19, 2014, the contents of which are hereby expressly Form 26 [15-03-2017(online)].pdf incorporated by reference Form 3 [13-12-2016(online)].pdf herein. Field of the Invention Form 5 [13-12-2016(online)].pdf [0001] The instant invention relates to pharmaceutical formulations comprising clevidipine in a sterile, ready to use, aqueous dispersion of nanoparticles that are stable against formation of Application Number: 201617042434 impurities and suitable for parenteral ac [0002] All documents cited to or relied to incorporated herein by Biblographic Data Complete Specification Application Status reference. Background of the Invention [0003] Clevidipine is a dihydropyridine reduces blood pressure in a subject to which it is administered. It **Detail** acting, highly selective drug that APPLICATION NUMBER 201617042434 is rapidly metabolized and exhibiting an APPLICANT NAME THE MEDICINES COMPANY about one minute. Therefore, clevidipine is used in a hospital setting DATE OF FILING 13/12/2016 Clevidipine is further E-MAIL characterized by having negligible solubi PCT INTERNATIONAL FILING DATE 19/05/2015 solubility in lipids. In PRIORITY DATE 19/05/2014 addition, clevidipine is chemically unsta vater Therefore clevidinine CLEVIDIPINE NANOPARTICLES AND PHARMACEUTICAL COMPOSITIONS THEREOF TITLE OF INVENTION PUBLICATION DATE (U/S 11A) 24/03/2017 **Application Status** Status Request For Examination not filed

View Examination Report(s)

View Documents

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT) (19) World Intellectual Property

Organization International Bureau

(43) International Publication Date WIPOPECT 26 November 2015 (26.11.2015)

(10) International Publication Number WO 2015/179334 Al

- (51) International Patent Classification: A61K 31/4422 (2006.01)
- (21) International Application Number:

PCT/US20 15/03 1470

- (22) International Filing Date:
- (25) Filing Language: (26) Publication Language:
- 62/000,1 19 19 May 2014 (19.05.2014)
- (71) Applicant: THE MEDICINES COMPANY [US/US]; 8 Sylvan Way, Parsippany, NJ 07054 (US).
- (72) Inventors: MOTHERAM, Rajeshwar: 17 Summerfield Boulevard, Davton, NJ 08810 (US), HANLEY, Sr., David C; 86 Whisconier Rd., Brookfield, CT 06804 (US). TÜRELI, Akif Emre; Industriestra (DE). KANTER, Monika; Am E
- (74) Agent: MEGERDITCHIAN, Sa One Gateway Center, Newark, NJ

(54) Title: CLEVIDIPINE NANOPART

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT. HN HR HU ID II. IN IR IS JP KE KG KN KP KR KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG 19 May 2015 (19.05.2015) MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, English TR. TT. TZ. UA. UG. US. UZ. VC. VN. ZA. ZM. ZW.

> Designated States (unless otherwise indicated, for kind of regional protection available): ARIPO (BW, GH, GM KE LR LS MW MZ NA RW SD SL ST SZ TZ. UG. ZM. ZW). Eurasian (AM. AZ. BY. KG. KZ. RU. TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ



(CONFIRMATION) ORIGINAL DOCUMENTS

THE MEDICINES C NJ 07054, United Sta



March 15, 2017 The Controller of Patents

Patent Office

Baudhik Sampada Bhawan

Plot No.32, Sector-14, New Delhi-110 075

> Indian Patent Application No. 201617042434 Re: Filed on: 13.12.2016

Applicant: The Medicine company Our Ref: IP36505/AK/sr

We have submitted the following document through online module of IPO on March 15, 2017 in respect of the above-identified application and the docket No. of the same is 16613:

> Executed Form 26

We now submit herewith the same in original. The Learned Controller is requested to take the same on record and proceed accordingly

MRISH TIWARI OF K & S PARTNERS

ATTORNEY FOR THE APPLICANT(s) IN/PA-1202

Mobile No: +91 8130055293 Email id: ipo@knspartners.com

Enclosure: as above

FORM 2

THE PATENTS ACT, 1970 (39 of 1970) & THE PATENTS RULES, 2003

COMPLETE SPECIFICATION (See section 10, rule 13)

"CLEVIDIPINE NANOPARTICLES AND PHARMACEUTICAL COMPOSITIONS THEREOF"

WO 2015/179334

PCT/US2015/031470

CLEVIDIPINE NANOPARTICLES AND PHARMACEUTICAL COMPOSITIONS THEREOF

Cross Reference to Related Applications

This application claims priority from U.S. Provisional Patent Application No. 62/000,119 filed on May 19, 2014, the contents of which are hereby expressly incorporated by reference herein.

Field of the Invention

[0001] The instant invention relates to pharmaceutical formulations comprising clevidipine in a sterile, ready to use, aqueous dispersion of nanoparticles that are stable against formation of impurities and suitable for parenteral administration.

[0002] All documents cited to or relied upon below are expressly incorporated herein by reference.

Background of the Invention

[0003] Clevidipine is a dihydropyridine calcium channel blocker that reduces blood pressure in a subject to which it is administered. It is characterized as a short-acting, highly selective drug that is rapidly metabolized and exhibiting an initial phase half-life of about one minute. Therefore, clevidipine is used in a hospital setting as an intravenous injection. Clevidipine is further characterized by having negligible solubility in water and moderate solubility in lipids. In addition, clevidipine is chemically unstable when in contact with water. Therefore clevidipine was developed as an oil-in-water emulsion (Cleviprex®). While the Cleviprex emulsion formulation addresses the physicochemical challenges of clevidipine and provides a ready to use product, significant limitations remain.



Application Number: 521/KOL/2015

Biblographic Data

Inventor

Complete Specification

Application Status

Invention Title	"SYNTHESIS OF VES	"SYNTHESIS OF VESICULAR PLATINUM NANOPARTICLES USING EDIBLE MUSHROOM"				
Publication Number	48/2016					
Publication Date	2016/11/18					
Publication Type	INA	Name	Address			
Application Number	521/KOL/2015	SUREKHA KUNDU	DEPARTMENT OF BO	TANY, UNIVERSITY OF CALCUTTA, 35 BA		
Application Filing Date	2015/05/13	NICKY SINGH	DEPARTMENT OF BO	DTANY, UNIVERSITY OF CALCUTTA, 35 BA		
Priority Number	-	Applicant				
Priority Country	-	Name	Address			
Priority Date	-	SUREKHA KUNDU NICKY SINGH		DTANY, UNIVERSITY OF CALCUTTA, 35 BAI		
Field Of Invention	(FI03) CHEMICAL	Abstract:				
Classification (IPC)	C07F-15/00		the state of the s	articles synthesized from H2PtCl6 solution		

Name	Address	Country	Nationality
SUREKHA KUNDU	DEPARTMENT OF BOTANY, UNIVERSITY OF CALCUTTA, 35 BALLYGUNGE CIRCULAR ROAD, KOLKATA 700019, INDIA	IN	IN
NICKY SINGH	DEPARTMENT OF BOTANY, UNIVERSITY OF CALCUTTA, 35 BALLYGUNGE CIRCULAR ROAD, KOLKATA 700019, INDIA	IN	IN

Applicant

Name	Address	Country	Nationality
SUREKHA KUNDU	DEPARTMENT OF BOTANY, UNIVERSITY OF CALCUTTA, 35 BALLYGUNGE CIRCULAR ROAD, KOLKATA 700019, INDIA	IN	IN
NICKY SINGH	DEPARTMENT OF BOTANY, UNIVERSITY OF CALCUTTA, 35 BALLYGUNGE CIRCULAR ROAD, KOLKATA 700019, INDIA	IN	IN

Abstract:

Our innovation deals with platinum nanoparticles synthesized from H2PtCl6 solution with cell-free extract of Pleurotus djamore NS21, an edible mushroom. It is a green biosynthesis of platinum nanoparticles using edible fungus. This method is simple, reproducible, cost efficient, with no release of toxic by-products produced by exudates of mycelial mats. It resulted in monodispersed nanoparticles of high efficiency. The particles were characterized using spectrophotometry showing typical absorbance peak at 260 nm. Transmission electron microscopy showed vesicular structures which were of different sizes. The size ranges of the vesicles are 2-12 nm diameters. At greater magnification the particles wee to seen to be embedded in vesicle-like structures which can likely be helpful for delivery of drugs or DNA into living cells. The biosynthesized nanoparticles had antimicrobial activity against the bacteria E. coli (DH5α), plant pathogenic bacteria Agrobacterium tumefaciens (LBA4404) and the plant pathogenic fungus Alternaria solani. These nanoparticles can inhibit the spore germination of plant pathogenic fungus Alternaria solani and has potency against multi-drug resistant (MDR) E. coli resistant to 100µg/ml Ampicillin and 35µg/ml Chloramphenicol. A. tumefaciens, which is resistant to 25µg/ml Rifampicin, and 50µg/ml Kanamycin were used as test MDR bacteria. These nanoparticles when tested on tomato leaf nuclei shows apoptogenic activity at higher concentrations. At lower concentrations it has no apoptogenic effect on tomato cells and therefore in regulated dose these can be used as anti-tumor agent. This method of synthesis of platinum nanoparticles have the potential to be done in a large scale, using fermenters, and can be applied in the field for crop protection and in the medical biotechnology. The apoptogenic property of the particles reveals that these have the potential to be used in the field of benign tumor therapy, cancer therapy and in drug delivery.



Biblographic Data

Complete Specification

Application Status

Complete Specification

Preamble to the Description Complete: The following specification particularly

describes the invention and the manner in which it is to be performed. Field of invention:

The present invention includes the product, method and therapeutic properties of

extracellular biosynthesis of platinum nanoparticles from edible mushroom fungus,

Pleurotus dimore NS21.

Background:

Nanoparticles, the dwarf particles bridging the gap between atomic or molecular

structure are of great scientific is applications in

diverse areas such as electronics, medical

diagnostic and biotechnology.

Platinum compound, cis-platin (cisimportant

biomedical applications as antitumo combination with other nanoparticle

bimetallic nanocluster form [1]. It is also kn

cells as compared to cis-platin [2]. With su a growing

need to develop processes for synth biological

PDF D	ocument	
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521-KOL-2015-(03-02-2017)-FORM-18.pdf

521-KOL-2015-(13-05-2015)-ABSTRACT.pdf

521-KOL-2015-(13-05-2015)-CLAIMS.pdf

521-KOL-2015-(13-05-2015)-DESCRIPTION (COMPLETE).pdf

521-KOL-2015-(13-05-2015)-FORM-1.pdf

521-KOL-2015-(13-05-2015)-FORM-2.pdf

521-KOL-2015-(13-05-2015)-FORM-3.pdf

521-KOL-2015-(13-05-2015)-SPECIFICATION.pdf

Biblographic Data Complete Specification Application Status

checApplication: Timeout expired. The timeout period elapsed prior to obtaining a connection from the pool. This may have occurred because all pooled connections were in use and max pool size was reached.

	Detail Detail					
APPLICATION NUMBER	521/KOL/2015					
APPLICANT NAME	1.SUREKHA KUNDU 2. NICKY SINGH					
DATE OF FILING	13/05/2015					
E-MAIL	dewan@rkdewanmail.com,					
PRIORITY DATE	NA					
TITLE OF INVENTION	"SYNTHESIS OF VESICULAR PLATINUM NANOPARTICLES USING EDIBLE MUSHROOM"					
PUBLICATION DATE (U/S 11A)	18/11/2016					

Application Status					
Request For Examination Date	03/02/2017 12:30:19				
View Examination Report(s)		View Documents			





[भाग II---खण्ड 3(ii)]

भारत का राजपत्र : उनसाधारण

101

F O R M 18 THE PATENTS ACT, 1970 (39 of 1970)

The Patents Rules, 2003
REQUEST/EXPRESS REQUEST FOR EXAMINATION
OF APPLICATION FOR PATENT
[See section 11B and rule 20(4)(ii), 24B(1)(i)]

(FOR OFFICE USE ONLY)

RQ. No: R 20 173003724

Filling Date: 3/2/17

Amount of Fee Paid: 1/2/1/20

CBR No: Signature:

Preamble to the Description Complete: The following specification particularly describes the invention and the manner in which it is to be performed.

1. APPLICANT (S)/OTHER INTERESTED PERSON

(a) NAME: Dr. NICKY SUNGH

(b) NATIONALITY: INDIAN

(c) ADDRESS: Department of Bothy, University of calcu

titled Synthesis of Veu cular platinum nanopart
examined under sections 12 and 13 of the Act.

examined under sections 12 and 13 of the Act.

Or

Field of invention:

The present invention includes the <u>product</u>, <u>method and therapeutic properties</u> of extracellular biosynthesis of platinum nanoparticles from edible mushroom fungus, *Pleurotus djmore* NS21.

Background:

Nanoparticles, the dwarf particles bridging the gap between atomic or molecular structure are of great scientific interest as they possess ability for applications in diverse areas such as electronics, cosmetics, coatings, packaging, medical diagnostic and biotechnology.

IPO KOLKATA 28052015 13:31

Podací úřady v Indii (LLL)

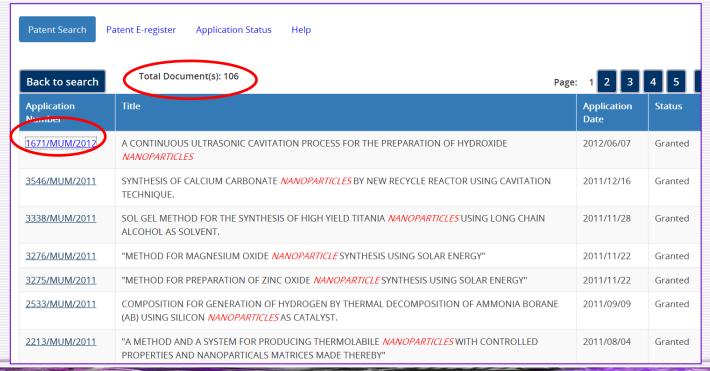
- Kolkata (dříve Calcutta) = KOL (CAL)
- Mumbai (dříve Bombay) = MUM (BOM)
- Chennai (dříve Madras) = CHE (MAS)
- •Delhi = DEL

nnnnn publication numbers (> 1912)

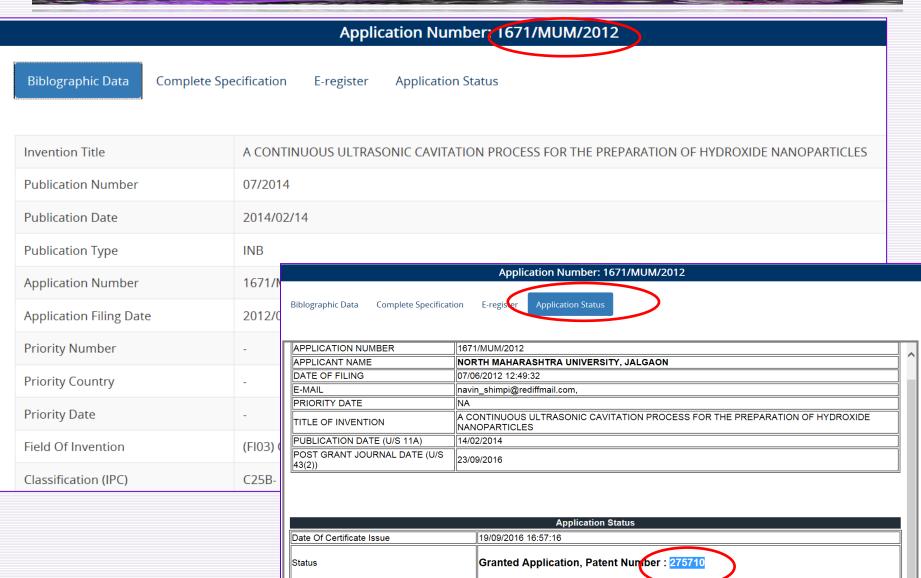
- up to six digits for the serial number (n)
- •no city code, no year

Vyhledávání patentů

Publication Type:		☐ Published	✓ Granted		
Application Date (National)	~	From: 01/01/1912	To: 31/03/2017	AND	~
Title	~	nanopartic*		OR	V
Abstract	~	nanopartic*		AND	~







View Documents

PLEASE CHECK THE CONTROLLER'S DECISION

Order(s)/Decision(s)

View Examination Report(s)

Patentový registr

Biblographic Data

Complete Specification

E-register Appli

Application Status





GOVERNMENT OF INDIA

Legal Statu 5:

Last Date

Due date of

Under Extension Period

19/06/2017

next renewal

00:00:00

Patent Number 275710
Application Number 1671/M

Type of Application ORDIN

Grant Title: A CONTINUOUS ULTRASONIC CAVITAT

Parent Application Number --

PCT International Application Number N/A

П JM/2012

ARY APPLICATION

Date of Patent 07/06/2012 12:49:32

N/A

Date of Grant 19/Sep/2016

Date of Recordal 19/Sep/2016

Appropriate Office MUMBAI

PCT International Filing Date

Contro

ION PROCESS FOR THE PREPARATION OF HYDROXIDE NANOPARTICLES

Biblographic Data Complete Specification E-register Application Status

Year:	Due date	s for Renewal	CBR No:	CBR Date:	Renewal Amount:	Renew
	Normal Due Date:	Due Date with Extension				
3 rd year						
4 th year						
5 th year						
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Děkuji Vám za pozornost.

