

PATENTSCOPE

MARKUSH SEARCH, PATENT FAMILIES AND RELATED FEATURES

Magdalena Zelenkovska, Senior Patent Data Manager
Patent Database Section, Global Databases Division
Infrastructure and Platforms Sector

Geneva, November 23, 2021

Classification: WIPO FOR OFFICIAL USE ONLY

Agenda

- Coverage
- NPL
- Deep Linking
- PATENTSCOPE Patent Families Definition
- PATENTSCOPE Patent Families vs. DocDB Patent Families
- Markush Search



PATENTSCOPE COVERAGE NEWS

Coverage News

- Collections published in 2021: New Zealand, Finland, Estonian Full text, Kazakhstan and Poland
- Improved Coverage page:
 - Latest Biblio
 - Update Frequency
 - Chemical Data
 - Chemical Indexed

https://patentscope.wipo.int/search/en/help/data_coverage.jsf

- Coming soon: Austria, Norway and Switzerland

NATIONAL COLLECTIONS - DATA COVERAGE

[Offices for which PCT national phase information is available](#)

Updated: October 14, 2021

Country	Latest Biblio	Update Frequency	Biblio Data	Abstract	Chemical Data	Chemical indexed	Doc Images	OCR [full-text] Indexed	Nb records
PCT	14.10.2021	Daily	19.10.1978 - 14.10.2021	19.10.1978 - 14.10.2021	11.01.1979 - 07.10.2021	860,272	4,162,545	Total: 4,154,561 English: 2,358,013 French: 138,461 Spanish: 28,271 German: 411,397 Korean: 133,068 Japanese: 696,480 Chinese: 362,074 Russian: 21,324 Portuguese: 5,473	4,162,545

Non-Patent Literature in Patentscope

- Patent and non-patent literature can be searched and consulted in the same way
- More than 175k documents (biblio and full-text) available and indexed
 - Open access (OA) content on [Nature.com](https://www.nature.com)
 - [Wikipedia](https://www.wikipedia.org)
 - More NPL sources will follow
- All documents have been classified, using AI, under the IPC classification
- Full-text available in English and can be translated into other 11 other languages with the help of WIPO Translate

MIR100HG RNA



57 results

Offices all

Languages en

Stemming false

Single Family Member false

Include NPL true



Sort: Relevance ▼ Per page: 10 ▼ View: All ▼

< 1 / 6 >

Machine translation ▼

1. [107858434](#) APPLICATION OF LNCRNA IN DIAGNOSIS AND PROGNOSTIC PREDICTION OF LIVER CANCER

CN - 30.03.2018

Int.Class [C12Q 1/6886](#) ⓘ Appl.No 201711414821.X Applicant FUDAN UNIVERSITY SHANGHAI CANCER CENTER Inventor WANG YILIN

The invention discloses application of lncRNA in diagnosis and prognostic prediction of liver cancer. The lncRNA is selected from one or multiple of TD-2574D22.4, SERHL, [MIR100HG](#) and SNHG20, and experiments prove that lncRNA TD-2574D22.4, SERHL, [MIR100HG](#) and SNHG20 present differential expression in patients with liver cancer. The invention further discloses a risk scoring model for predicting prognosis of the liver cancer. The risk scoring model serves as an auxiliary means to predict prognosis of the patients with the liver cancer so as to perform risk evaluation and monitoring on the patients.

2. [10.1038/S41388-021-01803-8](#) THE NONCODING [MIR100HG RNA](#) ENHANCES THE AUTOCRINE FUNCTION OF TRANSFORMING GROWTH FACTOR B SIGNALING

NPL - 01.05.2021

Int.Class [C12N 15/113](#) ⓘ Publisher nature Journal Oncogene

Abstract Activation of the transforming growth factor β (TGF β) pathway modulates the expression of genes involved in cell growth arrest, motility, and embryogenesis. An expression screen for long noncoding RNAs indicated that TGF β induced mir-100-let-7a-2-mir-125b-1 cluster host gene [[MIR100HG](#)] expression in diverse cancer types, thus confirming an earlier demonstration of TGF β -mediated transcriptional induction of [MIR100HG](#) in pancreatic adenocarcinoma. [MIR100HG](#) depletion attenuated TGF β signaling, expression of TGF β -target genes, and TGF β -mediated cell cycle arrest. Moreover, [MIR100HG](#) silencing inhibited both normal and cancer cell motility and enhanced the cytotoxicity of cytostatic drugs. [MIR100HG](#) overexpression had an inverse impact on TGF β signaling responses. Screening for downstream effectors of [MIR100HG](#) identified the ligand TGF β 1. [MIR100HG](#) and TGF β 1 mRNA formed ribonucleoprotein complexes with the RNA-binding protein HuR, promoting TGF β 1 cytokine secretion. In addition, TGF β regulated let-7a-2-3p, miR-125b-5p, and miR-125b-1-3p expression, all encoded by [MIR100HG](#) intron-3. Certain intron-3 miRNAs may be involved in TGF β /SMAD-mediated responses [let-7a-2-3p) and others [miR-100, miR-125b) in resistance to cytotoxic drugs mediated by [MIR100HG](#). In support of a model whereby TGF β induces [MIR100HG](#), which then enhances TGF β 1 secretion, analysis of human carcinomas showed that [MIR100HG](#) expression correlated with expression of TGF β 1 and its downstream extracellular target TGF β 1. Thus, [MIR100HG](#) controls the magnitude of TGF β signaling via TGF β 1 autoinduction and secretion in carcinomas.

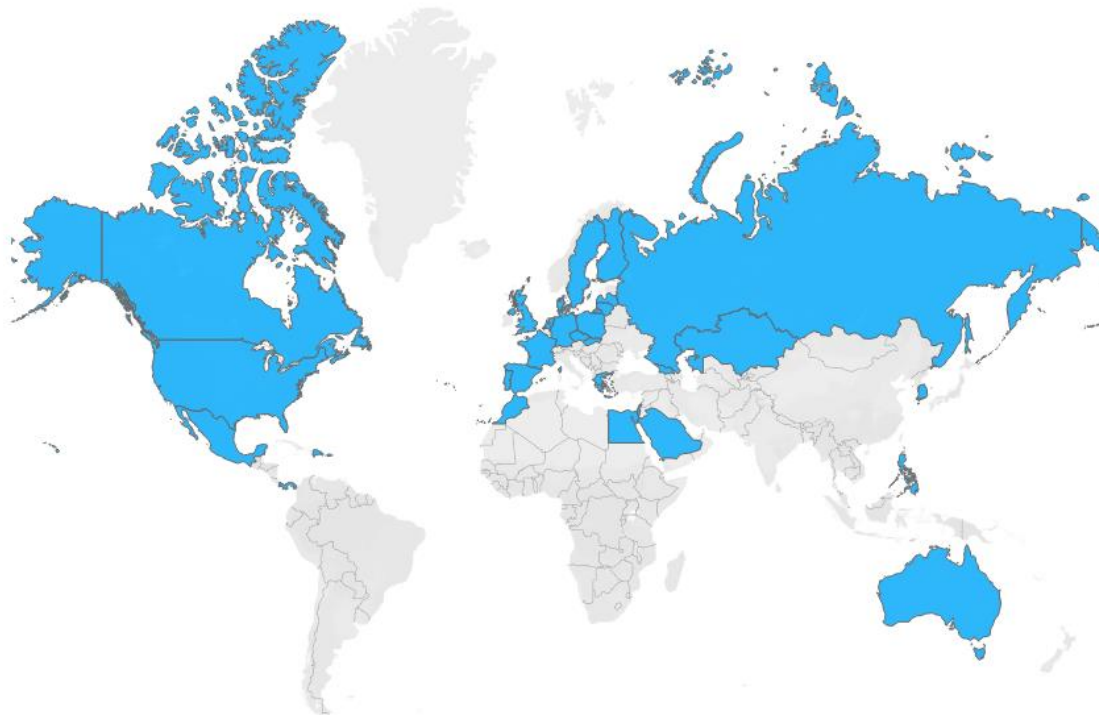
3. [10.1038/S41419-018-0869-2](#) LNCRNA [MIR100HG](#) PROMOTES CELL PROLIFERATION IN TRIPLE-NEGATIVE BREAST CANCER

NPL - 24.07.2018



DEEP LINKING

Deep Linking - Coverage



■ Deep Linking enabled for 32 authorities:

- Australia
- Canada
- Czech Republic
- Germany
- Denmark
- Dominican Republic
- Euro-Asian Patent Office
- Egypt
- European Patent Office
- Spain
- Finland
- France
- Great Britain
- Georgia
- Greece
- Israel
- South Korea
- Kazakhstan
- Latvia
- Lithuania
- Morocco
- Mexico
- Netherlands
- Panama
- Philippines
- Poland
- Portugal
- Russia
- Saudi Arabia
- Sweden
- Slovakia
- United States

Deep Linking - Access

PATENTSCOPE

Office
 Republic of Korea

Application Number
 1020180013779

Application Date
 05.02.2018

Publication Number
 1020180094520

Publication Date
 14.08.2019

Grant Number
 102139528

Grant Date
 30.07.2020

Publication Kind
 B1

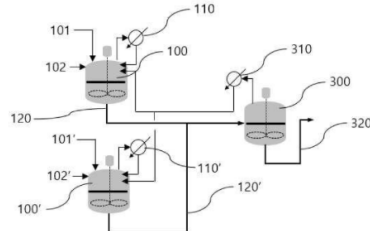
IPC
 C08F 36/04 C08F 2/00 C08F 2/01
 C08F 4/48 C08F 4/52 C08F 4/619
View more classifications

CPC
 C08F 36/04 C08F 2/001 C08F 2/01
 C08F 4/48 C08F 4/52 C08F 4/619
View more classifications

Applicants
 주식회사 엘지화학
 LG CHEM, LTD.

Inventors
 KO JUN SEOK
 JEONG HOI IN
 HWANG WOO SUNG
 고준석
 김동희
 정희인
 LEE JEONG SEOK
 황우성
 김동인

Title
 [EN] METHOD FOR MANUFACTURING CONJUGATED DIENE-BASED POLYMER AND APPARATUS FOR MANUFACTURING CONJUGATED DIENE-BASED POLYMER
 [KO] 공역디엔계 중합체 제조방법 및 공역디엔계 중합체 제조장치



Abstract

[EN]
 The present invention relates to a method for manufacturing a conjugated diene-based polymer. More specifically, the present invention provides the method for manufacturing the conjugated diene-based polymer and an apparatus for manufacturing the conjugated diene-based polymer, wherein the method comprises steps of: manufacturing a first polymer solution comprising a first conjugated diene-based polymer by adding a conjugated diene-based monomer, a catalyst, and a solvent to a parallel polymerization reactor in which two or more polymerization reactors are connected in parallel and performing a polymerization reaction; and manufacturing a second polymer solution comprising a second conjugated diene-based polymer by introducing the first polymer solution discharged from the parallel polymerization reactor into a series polymerization reactor connected in series with the parallel polymerization reactor and performing the polymerization reaction. During the polymerization reaction of the series polymerization reactor, gas generated by polymerization heat is condensed by a condenser provided in the series polymerization reactor and refluxed to a parallel polymerization reactor, and a reaction temperature of the series polymerization reactor is maintained at least 10 deg.C lower than the reaction temperature of the parallel polymerization reactor. COPYRIGHT KIPD 2019

[KO]
 본 발명은 공역디엔계 중합체 제조방법에 관한 것으로, 보다 상세하게는 2개 이상의 중합 반응기가 병렬로 연결된 병렬 중합 반응기에, 공역디엔계 단량체, 촉매 및 용매를 투입하고 중합 반응을 수행하여 제1 공역디엔계 중합체를 포함하는 제1 중합체 용액을 제조하는 단계, 및 상기 병렬 중합 반응기로부터 배출된 제1 중합체 용액을, 병렬 중합 반응기와 직렬로 연결된 직렬 중합 반응기에 투입하고 중합 반응을 수행하여 제2 공역디엔계 중합체를 포함하는 제2 중합체 용액을 제조하는 단계를 포함하고, 상기 직렬 중합 반응기의 중합 반응시, 중합열에 의해 발생되는 기체는, 직렬 중합 반응기에 구비된 콘덴서에 의해 응축되어 병렬 중합 반응기로 환류되며, 상기 직렬 중합 반응기의 반응온도는, 병렬 중합 반응기의 반응온도보다 10℃ 이상 낮게 유지되는 것인 공역디엔계 중합체 제조방법 및 이를 실시하기 위한 공역디엔계 중합체 제조장치를 제공한다.

Related patent documents

CN110869398 EP3636679 US20200207888 JP20200526626 WO/2019/151672

IP Office

METHOD FOR PREPARING CONJUGATED DIENE BASED POLYMER AND APPARATUS FOR PREPARING CONJUGATED DIENE BASED POLYMER
 공역디엔계 중합체 제조방법 및 공역디엔계 중합체 제조장치

Details Unexam. Full Text Publ. Full Text Registr. Details Administrative

Details Biographical Information Legal Status Claim Designated States Citation Family Patent

- (51) Int. CL C08F 36/04(2006.01.01) C08F 2/01(2006.01.01) C08F 2/00(2006.01.01) C08F 4/52(2006.01.01) C08F 4/619(2006.01.01) C08F 4/639(2006.01.01) C08F 4/48(2006.01.01)
- (52) CPC C08F 36/04(2013.01) C08F 2/01(2013.01) C08F 2/001(2013.01) C08F 4/52(2013.01) C08F 4/619(2013.01) C08F 4/639(2013.01) C08F 4/48(2013.01)
- (21) Application No.(Date) 1020180013779 (2018.02.05)
- (71) Applicant LG CHEM, LTD.
- (11) Registration No.(Date) 1021395280000 (2020.07.24)
- (65) Unex. Pub. No.(Date) 1020190094520 (2019.08.14) Full-doc Down
- (11) Publication No.(Date) (2020.07.30) Full-doc Down

Download Zoom

DOI QR f t

- (86) Int'l Application No.(Date)
- (87) Int'l Unex. Pub. No.(Date)
- (30) Priority info.
 (Country / No. / Date)

Legal Status	Registered
Examination Status	Decision to grant (General)
Trial Info	
Kind	Domestic Application / New Application
Right of Org. Application No. (Date)	
Related Application No.	
Request for an examination(Date)	Y(2019.05.28)
Number of examination claims	9

KPA (Korea Patent Abstract) The present invention relates to a method for manufacturing a conjugated diene-based polymer. More specifically, the present invention provides the method for manufacturing the conjugated diene-based polymer and an apparatus for manufacturing the conjugated diene-based polymer, wherein the method comprises steps of: manufacturing a first polymer solution comprising a first conjugated diene-based polymer by adding a conjugated diene-based monomer, a catalyst, and a solvent to a parallel polymerization reactor in which two or more polymerization reactors are connected in parallel and performing a polymerization reaction; and manufacturing a second polymer solution comprising a second conjugated diene-based polymer by introducing the first polymer

Deep Linking – Access to Additional Information

Citations

METHOD FOR PREPARING CONJUGATED DIENE BASED POLYMER AND APPARATUS FOR PREPARING CONJUGATED DIENE BASED POLYMER
공역디엔계 중합체 제조방법 및 공역디엔계 중합체 제조장치

Details	Unexam. Full Text	Publ. Full Text	Registr. Details	Administrative		
Details	Biographical Information	Legal Status	Claim	Designated States	Citation	Family Patent

* The information is based on the citation information attached to a Notification of reason for refusal by the examiner.

▶ Forward Citation

Country	Pub. Date	Pub. No.	Title	IPC
Republic of Korea	1020170047031 A	2017.05.04	APPARATUS FOR PREPARING OF POLYBUTADIENE	C08F 2/01

▶ Backward Citation

Application No	Application Date	Title	IPC
:: Empty ::			




Other Patent Families

METHOD FOR PREPARING CONJUGATED DIENE BASED POLYMER AND APPARATUS FOR PREPARING CONJUGATED DIENE BASED POLYMER
공역디엔계 중합체 제조방법 및 공역디엔계 중합체 제조장치

Details	Unexam. Full Text	Publ. Full Text	Registr. Details	Administrative		
Details	Biographical Information	Legal Status	Claim	Designated States	Citation	Family Patent

No.	Family No.	Country(code)	Country	Type
1	CN110869398	CN	China	A
2	EP03636679	EP	European Patent Office (EPO)	A1
3	EP03636679	EP	European Patent Office (EPO)	B1
4	JP32526625	JP	Japan	A
5	JP06929432	JP	Japan	B2
6	US20200207888	US	United States of America	A1
7	WO2019151672	WO	World Intellectual Property Organization (WIPO) (International Bureau of)	A1

▶ DOCDB Family info.

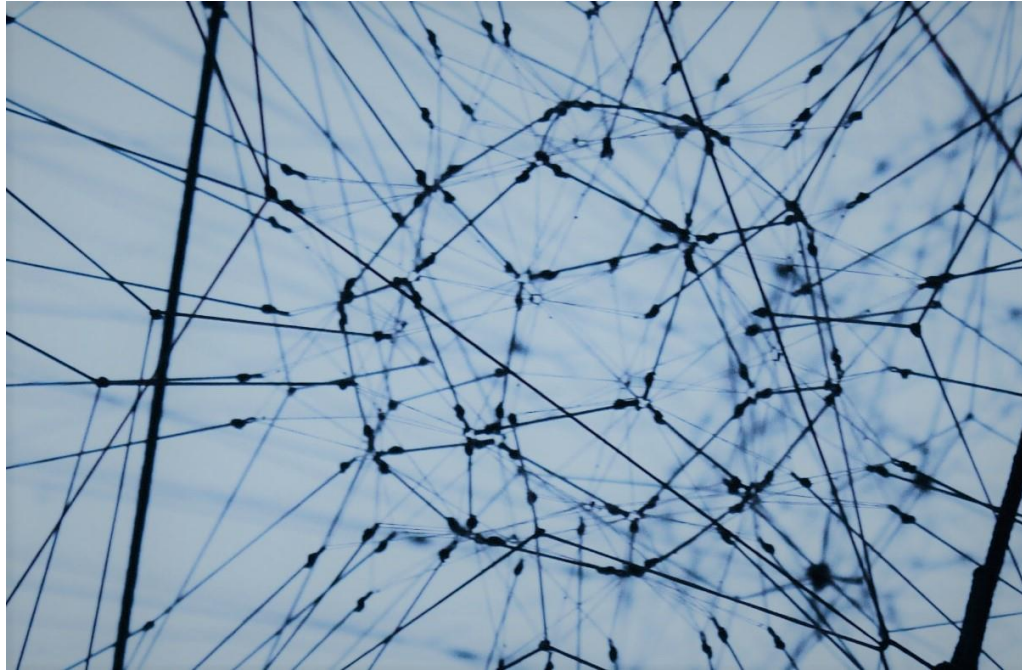
No.	Family No.	Country(code)	Country	Type
1	CN110869398 	CN	China	A
2	EP3636679 	EP	European Patent Office (EPO)	A1
3	EP3636679 	EP	European Patent Office (EPO)	A4

Legal Status

METHOD FOR PREPARING CONJUGATED DIENE BASED POLYMER AND APPARATUS FOR PREPARING CONJUGATED DIENE BASED POLYMER
공역디엔계 중합체 제조방법 및 공역디엔계 중합체 제조장치

Details	Unexam. Full Text	Publ. Full Text	Registr. Details	Administrative		
Details	Biographical Information	Legal Status	Claim	Designated States	Citation	Family Patent

No.	Document Title(Eng.)	Receipt/Delivery Date	Status	Receipt/Delivery No.
1	[Patent Application] Patent Application ([특허출원]특허출원서)	2018.02.05	수리 (Accepted)	112018012322823
2	Notification of change of applicant's information (출원인정보변경(경정)신고서)	2018.11.12	수리 (Accepted)	412018522760480
3	Notification of change of applicant's information (출원인정보변경(경정)신고서)	2018.12.19	수리 (Accepted)	412018526181830
4	[Request for Examination] Request for Examination (Request for Preferential Examination) ([심사청구]심사청구(우선심사신청)서)	2019.05.28	수리 (Accepted)	112019054435612
5	Notification of change of applicant's information (출원인정보변경(경정)신고서)	2019.08.19	수리 (Accepted)	412019516428496
6	Notification of reason for refusal (의견제출통지서)	2020.05.15	발송처리완료 (Completion of Transmission)	952020033641319
7	[Amendment to Description, etc.] Amendment ([명세서등 보정]보정서)	2020.06.10	보정승인간주 (Regarded as an acceptance of amendment)	112020059593726
8	([거절이유 등 통지에 따른 의견]의견서·답변서·소명서)	2020.06.10	수리 (Accepted)	112020059591915
9	Decision to grant (등록결정서)	2020.07.17	발송처리완료 (Completion of Transmission)	952020048764300



PATENT FAMILIES

PATENTSCOPE Patent Families Definition

- Groups of unique filings → Families of filings
 - 99.5 million filings translates into 124,5 million publications

1. US20180049614 - URBAN OR INDUSTRIAL ASPIRATOR

PT3013535 URBAN OR INDUSTRIAL ASPIRATOR 25.06.2014
Appl.No 147418214 Applicant GLUTTON CLEANING MACHINES DIVISION DE LANGE CHRISTIAN SA Pub.Date 02.11.2017 Pub.Kind T IC6
Pub.Lang

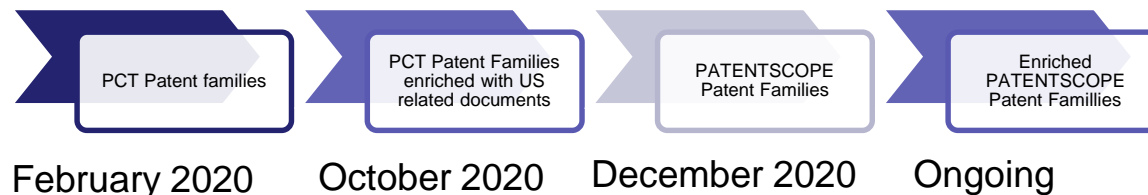
CA2916786 URBAN OR INDUSTRIAL ASPIRATOR 23.12.2015
Appl.No 2916786 Applicant GLUTTON CLEANING MACHINES DIVISION DE LANGE CHRISTIAN SA Pub.Date 31.12.2014 Pub.Kind A1.C IC2
Pub.Lang en

US20180049614 URBAN OR INDUSTRIAL ASPIRATOR 23.12.2015
Appl.No 14757715 Applicant Glutton Cleaning Machines Division de Lange Christian sa Pub.Date 07.07.2016 Pub.Kind A1,A2,A9,B2 IC6

US14757715B2	US20191112	XML . ZIP(XML + TIFFs)
US14757715A9	US20180222	XML . ZIP(XML + TIFFs)
US14757715A2	US20170112	XML . ZIP(XML + TIFFs)
US14757715A1	US20160707	XML . ZIP(XML + TIFFs)

PATENTSCOPE Patent Families Definition

Timeline



Scope

PCT Patent Families

- Built on strong links between a PCT application and its national entries
- A combination of
 - national phase entry data as received by participating offices
 - prior PCT links in the bibliographic data
 - first and only priority included

PCT Patent Families enriched with US related documents

- Provisionals, re-issues, republications, divisionals, continuations and continuations in part considered
- Grouping based on the calculation of first parent
- all re-issues, republications, divisionals and continuations of an application and the application itself grouped in a single family. The continuations in part are not included in that family

PATENTSCOPE Patent Families

- Include families via both PCT and Paris route
- based on priority data

Enriched PATENTSCOPE Patent Families

- Considers IP office specific practices
 - DPMA – Divisionals
 - NZ - Divisionals, Provisional
 - EG - Divisionals
 - JPO – Divisionals
 - PL – Divisionals
 - EP national entries from ES, DK, PT, LT and PL

PATENTSCOPE Patent Families – Inclusion Criteria

Inclusion Criteria

IC1 - PCT application from which the family originated

IC2 - National entry of a PCT application

IC3 - National entry of a PCT application not found in PATENTSCOPE

IC4 - US application related to another US application already included in the family

IC5 - Sole priority inside the family

IC6 – Connected by priority field

IC7 -National application related to another application of the same national office already included in the family

PATENTSCOPE Patent Families – Inclusion Criteria (first Release)

■ PCT application → IC1

■ PCT NPE

■ NPE found in Patentscope → IC2

■ NPE not found in Patentscope → IC3

■ NPE does not meet the requirements

■ National Prior PCT → IC2

■ PCT priorities, sole priority → IC5

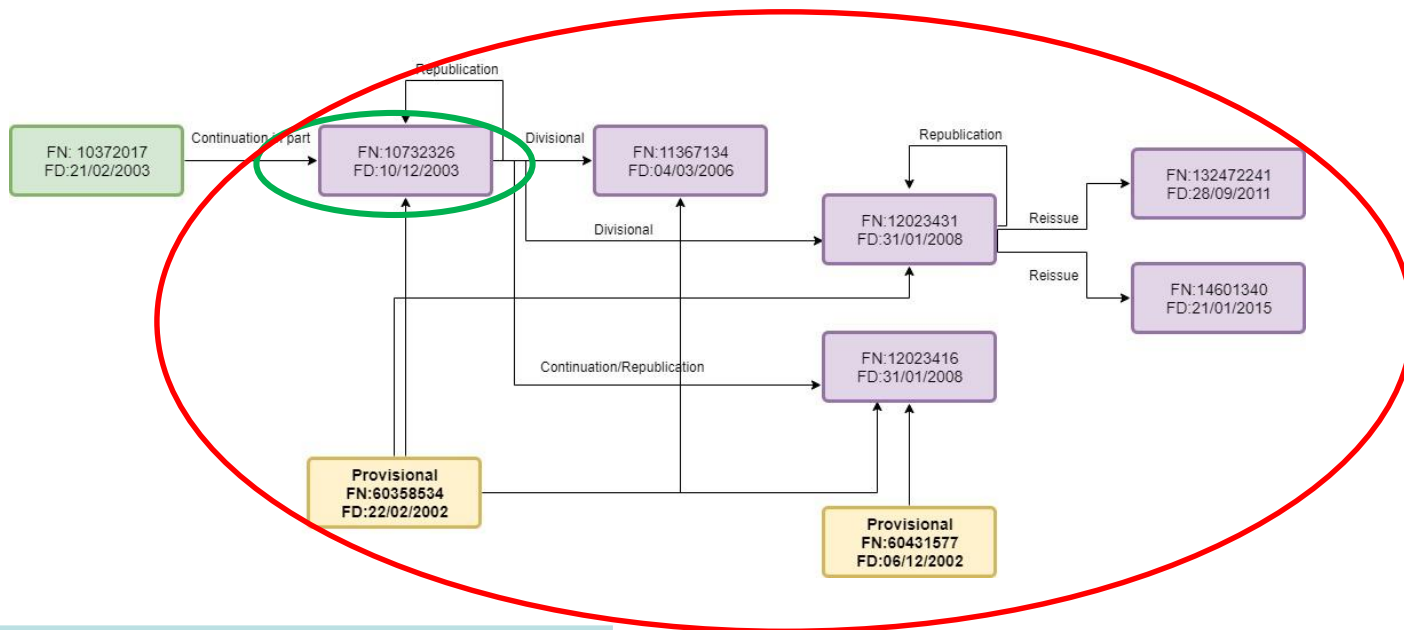
Office	Entry Date	National Number	National Status
Iran (Islamic Republic of)	20.01.2020	139850140003009756	
India	01.05.2020	202047018695	Published: 12.06.2020
India		2.02047E+11	Published: 12.06.2020

PATENTSCOPE Patent Families – Inclusion Criteria (second Release)

- Treated separately because of complexity
- Consider
 - Provisional applications for future referencing
 - Republications & Reissue → IC4
 - Continuations & Divisionals → IC4, defined as pairs of a parent and a child and attached to an application in a recursive manner
 - Continuations-in-part, not part of the same family

PATENTSCOPE Patent Families – Inclusion Criteria (second Release) - Example

Enrichment via US related documents – An example



10732326 - priorities=related documents

11367134 - priorities=related documents + application itself

12023431 - no priorities

12023416 - priorities=related documents + application itself

13247241 - no priorities

14601340 - no priorities

PATENTSCOPE Patent Families – Inclusion Criteria (third Release)

■ Consider

- Sole priority (PCT or national) → IC5

- Matching priorities (PCT and national) → IC6


■ Exceptions

- US Provisional

- JP Withdrawn

- Circular priorities

PATENTSCOPE Patent Families – Inclusion Criteria (third Release) - Example

 Inquiry of history information

PatentsApplication 2015-171932 [Publication2017-049761](#)

[Register6367166](#) Right has not been cancelled

* NOTICES *

JPO and INPIT are not responsible for any damages caused by the use of this translation.

1 This document has been translated by computer. So the translation may not reflect the original precisely.

2 **** shows the word which can not be translated.

History Records Application Information Registration Information Divisional Application Information

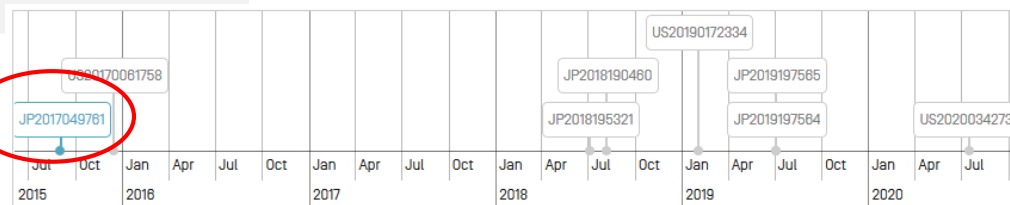
Patents
Application 2015-171932
Register 6367166

Application 2018-126562

Application 2018-147687

Application 2019-124457

Application 2019-124458



JP2017049761	ELECTRONIC APPARATUS AND METHOD	01.09.2015
Appl.No 2015171932	Applicant TOSHIBA CORP	Pub.Date 09.03.2017
	Pub.Kind A,B2	Pub.Lang ja
		IC5
US20170061758	ELECTRONIC APPARATUS AND METHOD	14.12.2015
Appl.No 14988759	Applicant KABUSHIKI KAISHA TOSHIBA	Pub.Date 02.03.2017
	Pub.Kind A1,B2	Pub.Lang
		IC4
JP2018195321	WEARABLE TERMINAL AND METHOD	03.07.2018
Appl.No 2018128582	Applicant TOSHIBA CORP	Pub.Date 08.12.2018
	Pub.Kind A	Pub.Lang ja
		IC7
JP2018190460	WEARABLE TERMINAL AND METHOD	06.08.2018
Appl.No 2018147887	Applicant TOSHIBA CORP	Pub.Date 29.11.2018
	Pub.Kind A	Pub.Lang ja
		IC7
US20190172334	ELECTRONIC APPARATUS AND METHOD	01.02.2019
Appl.No 18285900	Applicant KABUSHIKI KAISHA TOSHIBA	Pub.Date 08.08.2019
	Pub.Kind A1,B2	Pub.Lang
		IC4
JP2019197564	WEARABLE TERMINAL, SYSTEM, AND METHOD	03.07.2019
Appl.No 2019124457	Applicant TOSHIBA CORP	Pub.Date 14.11.2019
	Pub.Kind A	Pub.Lang ja
		IC7
JP2019197565	WEARABLE TERMINAL, SYSTEM, AND METHOD	03.07.2019
Appl.No 2019124458	Applicant TOSHIBA CORP	Pub.Date 14.11.2019
	Pub.Kind A	Pub.Lang ja
		IC7

PATENTSCOPE Patent Families – Inclusion Criteria (continuous enrichment)

US Application with PL priority in PATENTSCOPE

PermaLink Machine translation ▼

Office
United States of America

Application Number
13196295

Application Date
27.07.2011

Publication Number
201200262

Publication Date
02.02.2012

Publication Kind
A1

IPC
H04N 7/14 H04N 7/18

CPC
G06F 3/013 A61B 3/113 G06F 3/0481
G06F 2203/04806

Applicants
Czyzewski Andrzej
Kostek Bożena
Rybicki Rafał

Inventors
Czyzewski Andrzej
Kostek Bożena
Rybicki Rafał

Priority Data
391974 27.07.2010 PL

Title
[EN] Manner of ranging items on the computer monitor screen surface, especially key words for the requirements of web browser users

```

    graph TD
      IR[IR leds] -- light --> Eye[eye]
      IR -- light --> Image[image surface]
      Image -- image data --> Camera[camera]
      Camera -- image data --> Computer[computer]
      Computer -- results --> Results[results]
      Image -- image data --> DetectGlasses[detector of glasses' position]
      DetectGlasses --> DetectPupil[detector of pupil's centre location]
      DetectPupil --> Computer
  
```

Abstract
[EN]
The manner of measuring the location of user's eyesight fixation point on the computer screen surface based on illuminating the eye surface, monitoring the eye with a camera and analysing light reflecting from the pupil surface is characterized by the fact that sources of illumination are installed in the camera axis, and in corners of computer monitor and/or somewhere near them. This light is an infrared light and depending on features characteristic for the eyes of the user, sources of illumination are turned on or turned off in sequence or jointly, and then, constellations of reflections from pupil's surface are recorded in camera image, whereas the camera image is transferred to undergo processing by the computer and by software.

Related patent documents
PL 408134 PL 226775 PL 229076 PL 226774

Office
Polska

Application Number
391974

Application Date
27.07.2010

Title
[EN] Method for measuring the position of the user's visual fixation point on the surface of a computer screen, system for the implementation of this method and practical applications of this method
[PL] Układ do pomiaru położenia punktu fiksacji wzroku użytkownika na powierzchni ekranu komputerowego

The PL priority and its divisionals in the patent search tool of the Polish Patent Office

DETAILS PAT - P.391974

General information

Application number	P.391974	Exclusive right number	Pat.229076
Name/Title	Układ do pomiaru położenia punktu fiksacji wzroku użytkownika na powierzchni ekr...	Status	Prawo w mocy
Application date	2010-07-27	Applicant/Holder	POLITECHNIKA GDANSKA, Gdańsk, PL

Additional information

Divisional application number	P.408134 P.408119 P.408135	Application drawings from the filing date	Open link
Date of payment for the next protection period	2022-07-27	Search Report	Open link
Expected fee	900,00	Claims from the filing date	Open link
Description from the application date	Open link		

PATENTSCOPE Patent Families - Interface

1. WO2016187407 - CANCER VACCINE COMPRISING MRNA ENCODING A M-LIKE-PROTEIN

PCT Biblio. Data Description Claims Drawings ISR/WOSA/A17[2][a] National Phase **Patent Family** Notices Documents

PermaLink Machine translation v

Publication Number

WO/2016/187407

Publication Date

24.11.2016

International Application No.

PCT/US2016/033235

International Filing Date

19.05.2016

IPC

A61K 39/09 2006.1

CPC

A61K 2039/5152 A61K 2039/5156

A61K 2039/5256 A61K 2039/53

A61K 2039/54 A61K 2039/552

[View more classifications](#)

Applicants

MORPHOGENESIS, INC. [US]/[US]
4613 N. Clark Avenue Tampa, FL 33614, US

Title

[EN] CANCER VACCINE COMPRISING MRNA ENCODING A M-LIKE-PROTEIN
[FR] VACCIN CONTRE LE CANCER COMPORTANT UN ARNM CODANT POUR UNE PROTÉINE DU TYPE M

Abstract

[EN] Synthetic bacterial messenger RNA can be used to prepare autologous, allogenic or direct nucleic acid cancer vaccines. Cancer cells are transfected either *in vitro* or *in vivo* with mRNA obtained from DNA that encodes an immunogenic bacterial protein. An immune response to the cancer is generated from direct administration of the mRNA *in vivo* or administration of vaccines prepared from cancer cells *in vitro*.
[FR] L'invention concerne un ARN messager bactérien, synthétique, qui peut être utilisé pour préparer des vaccins contre le cancer autoplastiques, allogènes ou utilisant directement l'acide nucléique. Les cellules cancéreuses sont transfectées *in vitro* ou *in vivo* avec un ARNm obtenu de l'ADN qui code pour une protéine bactérienne immunogène. Une réponse immunitaire contre le cancer est générée par l'administration directe de l'ARNm *in vivo* ou par l'administration de vaccins préparés *in vitro* à partir de cellules cancéreuses.

Related patent documents

US20170042993 AU2016264363 EP3297664 CN107847577 JP2018521115 DK3297664
CA2985097 US20200317764 JP2020169185

US20170042993 MULTI-INDICATION MRNA CANCER IMMUNOTHERAPY

Appl.No 15114943 Applicant MORPHOGENESIS, INC. Pub.Kind A1,B2

Inclusion Criteria IC2

Appl.Date 19.05.2016

Pub.Date 16.02.2017

AU2016264363 CANCER VACCINE COMPRISING MRNA ENCODING A M-LIKE-PROTEIN

Appl.No 2016264363 Applicant Morphogenesis, Inc. Pub.Kind A,A1,B2

Inclusion Criteria IC2

Appl.Date 19.05.2016

Pub.Date 24.11.2016

EP3297664 CANCER VACCINE COMPRISING MRNA ENCODING A M-LIKE-PROTEIN

Appl.No 16728771 Applicant MORPHOGENESIS INC Pub.Kind A1,B1 Pub.Lang en

Inclusion Criteria IC2

Appl.Date 19.05.2016

Pub.Date 28.03.2018

CN107847577 CANCER VACCINE COMPRISING MRNA ENCODING A M-LIKE-PROTEIN

Appl.No 201680029126.9 Applicant MORPHOGENESIS INC Pub.Kind A

Inclusion Criteria IC2

Appl.Date 19.05.2016

Pub.Date 27.03.2018

WO/2016/187407 CANCER VACCINE COMPRISING MRNA ENCODING A M-LIKE-PROTEIN

Appl.No PCT/US2016/033235 Applicant MORPHOGENESIS, INC. Pub.Kind A Pub.Lang en

Inclusion Criteria IC1

Appl.Date 19.05.2016

Pub.Date 24.11.2016

JP2018521115 M様タンパク質をコードするMRNAを含む癌ワクチン

Appl.No 2018512827 Applicant モルフォジェネシス、インク。 Pub.Kind A,A5 Pub.Lang ja

Inclusion Criteria IC2

Appl.Date 19.05.2016

Pub.Date 02.08.2018

DK3297664 CANCERVACCINE OMFATTENDE MRNA, DER KODER FOR ET M-LIGNENDE PROTEIN

Appl.No 16728771 Applicant Morphogenesis, Inc. Pub.Kind T3 Pub.Lang da

Inclusion Criteria IC6

Appl.Date 19.05.2016

Pub.Date 07.12.2020

CA2985087 CANCER VACCINE COMPRISING MRNA ENCODING A M-LIKE-PROTEIN

Appl.No 2985087 Applicant MORPHOGENESIS, INC. Pub.Kind A1,C Pub.Lang en

Inclusion Criteria IC2

Appl.Date 03.11.2017

Pub.Date 24.11.2016

US20200317764 MODIFIED MRNA FOR MULTICELL TRANSFORMATION

Appl.No 16869642 Applicant MORPHOGENESIS, INC. Pub.Kind A1

Inclusion Criteria IC4

Appl.Date 08.05.2020

Pub.Date 08.10.2020

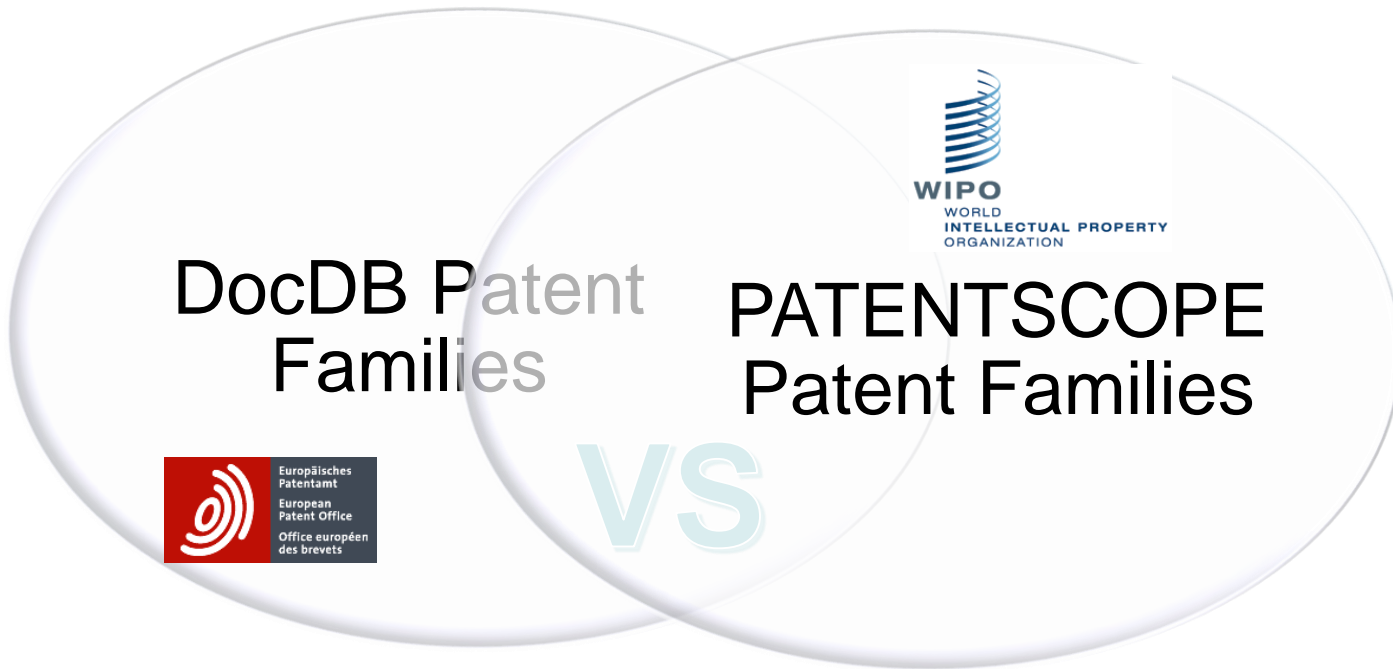
JP2020169185 CANCER VACCINES INCLUDING MRNA ENCODING M-LIKE PROTEIN

Appl.No 2020101492 Applicant MORPHOGENESIS INC Pub.Kind A Pub.Lang ja

Inclusion Criteria IC6

Appl.Date 11.06.2020

Pub.Date 15.10.2020



DocDB Patent Families



VS

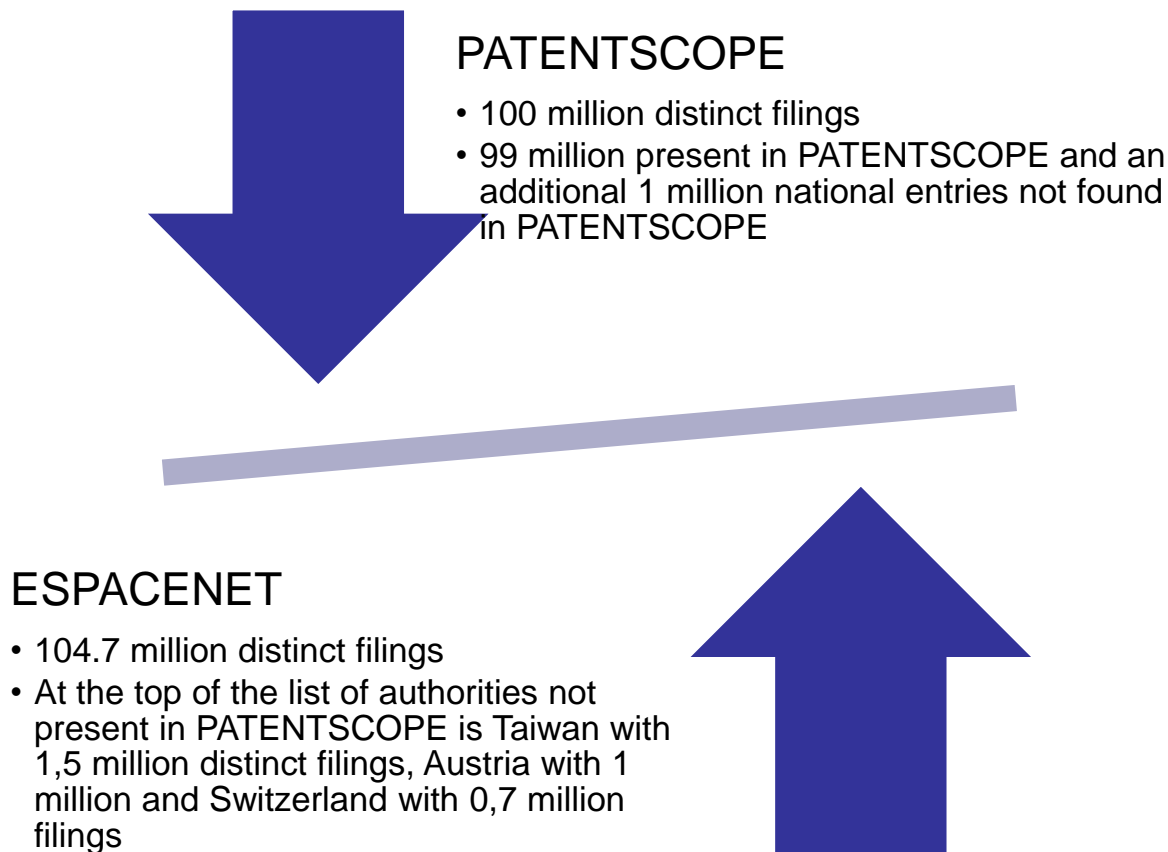
PATENTSCOPE Patent Families



PATENTSCOPE vs. DOCDB Patent families

- Comparing PATENTSCOPE patent families to DocDB families is necessary because DocDB patent families have been the most widely accepted patent families by the user community
- **Disclaimer:** The numbers in the slides below are based on unique filings. In DocDB multiple versions of the same filing exist while in PATENTSCOPE they are aggregated in one record. For the purposes of this comparison the counts shown for DocDB are also aggregated values. It is possible that due to formatting issues and in exceptional cases some filings are being counted more than once. Therefore the numbers below should be read as closest approximation rather than exact numbers. In order to do this comparison with greater certainty the numbers calculated should be provided by each authority for its own data.

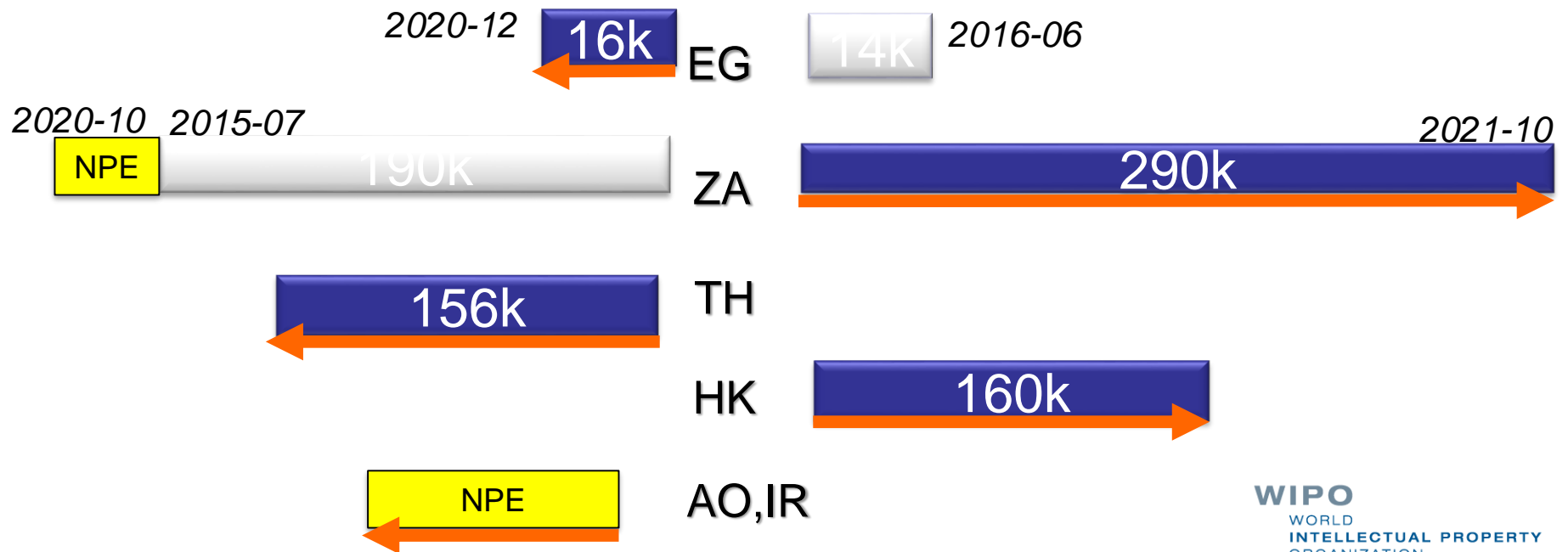
PATENTSCOPE vs. DOCDB Patent families* - coverage differences



This doesn't mean that differences in the coverage counts are due to the missing authorities! On the contrary the coverage differences come in many flavours!

PATENTSCOPE vs. DOCDB Patent families* - coverage differences

PATENTSCOPE ↔ Espacenet



PATENTSCOPE vs. DOCDB Patent families - coverage differences

MATCHING COVERAGE

- Majority of IP offices including: IP5, Latipat, Arabpat Australia, Russia, Canada

EPO MEMBER STATES

- Matching coverage in most major collections such as France, Germany, Great Britain, Denmark, Finland etc..
- Lack of a few additional collections compensated with National Entries

PATENTSCOPE'S STRENGTHS

- National Collections from Southeast Asian Countries and India
- National entry phase from Iran, Angola, Sri Lanka etc..



LACK OF DATA ON BOTH SIDES

- ARIPO member states



The lists above are only random examples and are not exhaustive!

PATENTSCOPE vs. DOCDB Patent families* - the counts!

		PATENTSCOPE	DocDB
Unique filings		100 million	104.7 million
Number of patent family ids		71.5 million	75 million
Multi-member families	Total	8.93 million	8.98 million
	Number of distinct filings in family	37.3 million	37.8 million
Single-member families	With members published more than once	9.5 million	11.9 million
	With members published only once	53 million	54.1 million
	Total	62.5 million	66 million

* (on 19.11.2021)

PATENTSCOPE vs. DOCDB Patent families – the case of being complementary...

PATENTSCOPE only

- **ID**2016/04223
- **IN**2435/KOLNP/2015
- **MY**PI 2015001901
- **TH**171317
- **VN**45030
- **VN**1201503122

PATENTSCOPE & Espacenet

- AR094676A1
- AU2014211583A1/AU2014211583B2
- CA2899013A1/CA2899013C
- CN105229736A/CN105229736B
- CN110517700A
- EP2951820A1/EP2951820B1
- ES2616434T3
- JP2016505902A/JP6148810B2
- KR20150108848A/KR101701081B1
- MX2015009745A/MX347410B
- PT2951820T
- **PL**2951820T3
- RU2015136467A/RU2618848C2
- SG11201505947XA
- **WO2014118136A1**
- US2015332698A1
- US2020227059A1
- **US**2019103121A1/US10622000B2

Espacenet Only

- **HK**1218461A1
- **TW**201434037A/**TWI**549120B

**PATENTSCOPE AND DocDB families
complement each other!**

PATENTSCOPE: <https://patentscope.wipo.int/search/en/detail.jsf?docId=WO2014118136>

Espacenet: <https://worldwide.espacenet.com/patent/search/family/050033499/publication/WO2014118136A1?q=WO2014118136>

PATENTSCOPE vs. DOCDB Patent families – the case of merging families...

<u>EP2318495</u>	LIGHT DUTY LIQUID CLEANING COMPOSITIONS AND METHODS OF MANUFACTURE AND USE THEREOF	17.06.2008
Appl.No 08771272	Applicant COLGATE PALMOLIVE CO	Pub.Date 11.05.2011 Pub.Kind A1 Pub.Lang en
<u>US20110092407</u>	LIGHT DUTY LIQUID CLEANING COMPOSITIONS AND METHODS OF MANUFACTURE AND USE THEREOF	17.06.2008
Appl.No 12997622	Applicant Colgate-Palmolive Company	Pub.Date 21.04.2011 Pub.Kind A1 Pub.Lang
<u>CA2727307</u>	LIGHT DUTY LIQUID CLEANING COMPOSITIONS AND METHODS OF MANUFACTURE AND USE THEREOF	17.06.2008
Appl.No 2727307	Applicant COLGATE-PALMOLIVE COMPANY	Pub.Date 23.12.2009 Pub.Kind A1,C Pub.Lang en
<u>AU2008358055</u>	LIGHT DUTY LIQUID CLEANING COMPOSITIONS AND METHODS OF MANUFACTURE AND USE THEREOF	17.06.2008
Appl.No 2008358055	Applicant Colgate-Palmolive Company	Pub.Date 16.12.2010 Pub.Kind B2 Pub.Lang

In the same family both in PATENTSCOPE and DocDB

<u>MYPI 2010005951</u>	LIGHT DUTY LIQUID CLEANING COMPOSITIONS AND METHODS OF MANUFACTURE AND USE THEREOF	17.06.2008
Appl.No PI 2010005951	Applicant COLGATE PALMOLIVE COMPANY	Pub.Date 21.11.2013 Pub.Kind A Pub.Lang

<u>WO/2009/154616</u>	LIGHT DUTY LIQUID CLEANING COMPOSITIONS AND METHODS OF MANUFACTURE AND USE THEREOF	17.06.2008
Appl.No PCT/US2008/067228	Applicant COLGATE-PALMOLIVE COMPANY	Pub.Date 23.12.2009 Pub.Kind A Pub.Lang en

In the same family both in PATENTSCOPE and DocDB

PATENTSCOPE sometimes merges multiple DocDB families!

PATENTSCOPE vs. DOCDB Patent families – the case of merging families...

TH113440	สารผสมของเหลวทำความสะอาดงานเบา และวิธีของการผลิต และการใช้ประโยชน์ของสารนั้น	15.06.2009
Appl.No 0901002651	Applicant คอลเกต-ปาล์มโลิฟ คัมปะนี	Pub.Date 26.04.2012 Pub.Kind A Pub.Lang
NZ589507	LIGHT DUTY LIQUID CLEANING COMPOSITIONS AND METHODS OF MANUFACTURE AND USE THEREOF	24.11.2010
Appl.No 589507	Applicant COLGATE-PALMOLIVE COMPANY	Pub.Date 22.12.2011 Pub.Kind B Pub.Lang en
IL209668	LIGHT DUTY LIQUID CLEANING COMPOSITIONS AND METHODS OF MANUFACTURE AND USE THEREOF	01.12.2010
Appl.No 209668	Applicant COLGATE-PALMOLIVE COMPANY	Pub.Date 28.02.2011 Pub.Kind A Pub.Lang en
DOP2010000376	COMPOSICIONES LIMPIADORAS LIQUIDAS DE USO GENERAL Y METODOS PARA SU PREPARACION Y USO	06.12.2010
Appl.No 2010000376	Applicant COLGATE PALMOLIVE COMPANY	Pub.Date 15.01.2011 Pub.Kind A Pub.Lang es
PH12010502745		06.12.2010
Appl.No 12010502745		IC3
MXMX/A/2010/013848	LIGHT DUTY LIQUID CLEANING COMPOSITIONS AND METHODS OF MANUFACTURE AND USE THEREOF	14.12.2010
Appl.No MX/a/2010/013848	Applicant COLGATE-PALMOLIVE COMPANY	Pub.Date 23.05.2011 Pub.Kind A Pub.Lang es

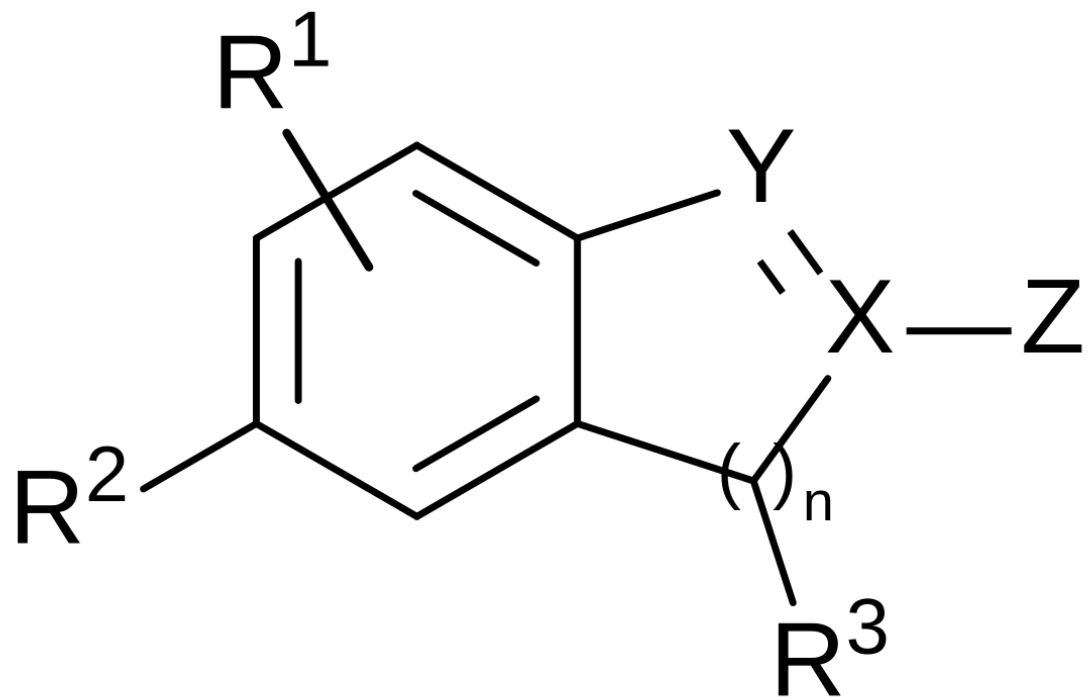
Not In the same family in DocDB

In the same family both in PATENTSCOPE and DocDB

PATENTSCOPE sometimes merges multiple DocDB families!

Summary: things to remember

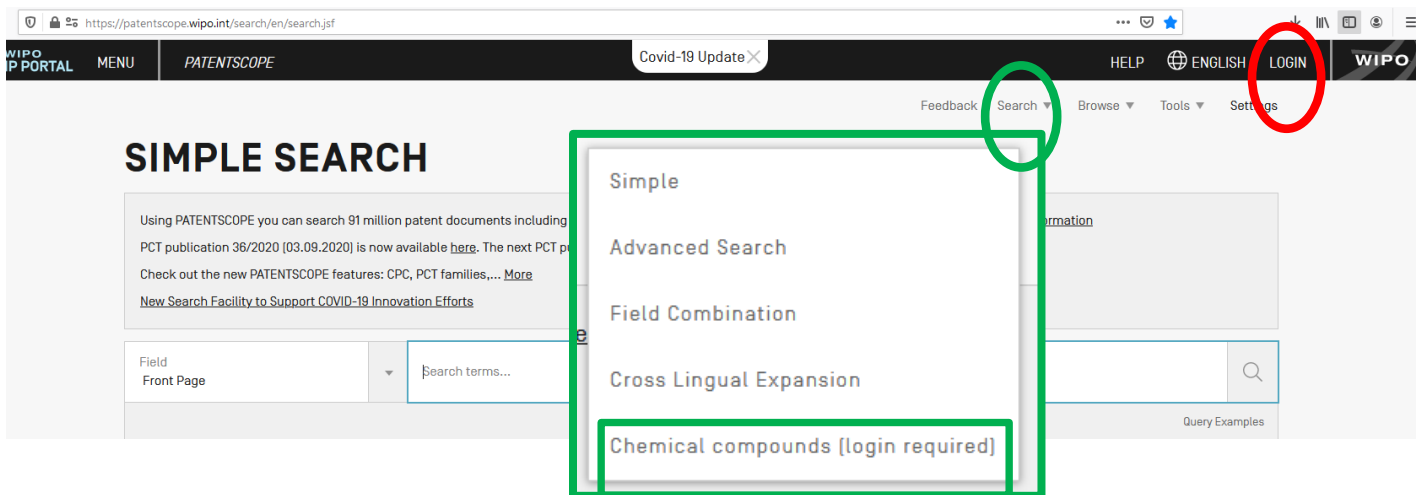
- The most fundamental difference between PATENTSCOPE and Espacenet is in the way they count coverage.
- The coverage of the two differs significantly and results in patent families which are rarely identical, but very often complementary!!!
- PATENTSCOPE's patent families strong point is the inclusion in the patent families members from authorities not present or poorly represented in Espacenet such as the Southeast Asian countries and India.



MARKUSH SEARCH

Access

- Released on September 13th 2021
- Available freely at <https://patentscope.wipo.int>
- Access only with a WIPO account
- Two ways to carry out a Markush Search



Markush search: Using enumerated markush structures

Feedback Goto Search ▾ Browse ▾ Tools ▾ Settings

CHEMICAL COMPOUNDS SEARCH ▾

[Convert structure](#) [Upload structure](#) [Structure editor](#) [Found compounds](#) [Found Markush Formulas](#)

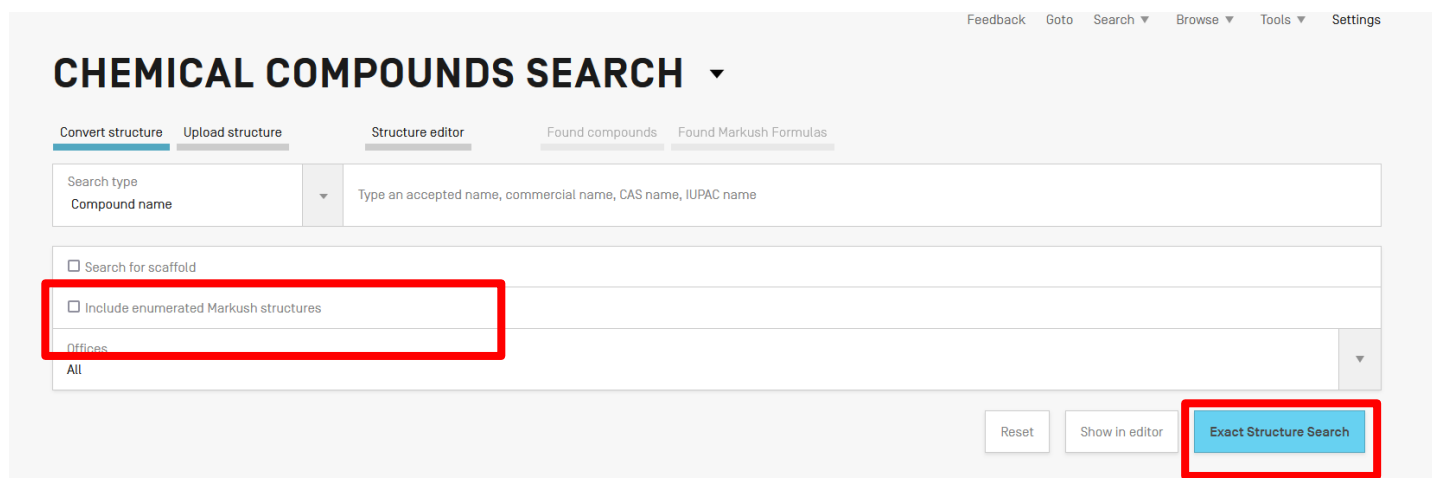
Search type
Compound name ▾ Type an accepted name, commercial name, CAS name, IUPAC name

Search for scaffold

Include enumerated Markush structures

Offices
All ▾

Reset Show in editor **Exact Structure Search**



CHEMICAL COMPOUNDS SEARCH ▾

[Convert structure](#)

[Upload structure](#)

[Structure editor](#)

[Found compounds](#)

[Found Markush Formulas](#)

Search type

Compound name

Type an accepted name, commercial name, CAS name, IUPAC name
cimetidine

Search for scaffold

Include enumerated Markush structures

Offices

All

Reset

Show in editor

Exact Structure Search

CHEM:(AQIXAKUUQRKLN-UHFFFAOYSA-N) OR NUM:(AQIXAKUUQRKLN-UHFFFAOYSA-N)

28,070 results Offices all Languages all Stemming true Single Family Member false Include NPL false

Sort: Relevance Per page: 100 View: All+Image

1/281

Download Machine translation

1. [0560937](#) PHARMACEUTICAL COMPOSITIONS

EP - 22.09.1993

Int.Class [A61K 9/18](#) Appl.No 92903167 Applicant SMITHKLINE BEECHAM CORP Inventor MARSHALL KEITH

The present invention provides for a phased-release oral dosage form comprising a plurality of H_2 receptor antagonist pellets in a polymer matrix. Each phase, containing a plurality of pellets which may be optionally coated with a release delaying substance, may have different release rates, thereby providing release of the H_2 antagonist over an extended duration of time.



2. [0650353](#) PALATABLE PHARMACEUTICAL COMPOSITIONS

EP - 03.05.1995

Int.Class [A61K 9/00](#) Appl.No 93914418 Applicant SMITHKLINE BEECHAM CORP Inventor BHARDWAJ SANJAY

A pharmaceutical granular composition and method for taste masking bitter, unpleasant tasting drugs comprising a drug core and as a taste masking agent methacrylate ester copolymers. The method comprises coating the drug cores with separate layers of aqueous dispersions of the copolymers. Additionally, the coating composition may contain plasticizers and conventional excipients. The granules of the present invention can be used in the preparation of chewable tablets which have good palatability and bioavailability. Preferable copolymers are poly[ethylacrylate, methylmethacrylate] to which quaternary ammonium groups have been introduced to modify the permeability of the ester. The coating system of this invention releases the drug by diffusion and is influenced by drug solubility and media pH.



3. [0347767](#) DISPERSIBLE CIMETIDINE TABLETS

EP - 27.12.1989

Int.Class [A61K 9/20](#) Appl.No 89110951 Applicant LEK, TOVARNA FARMACEVTSKIH IN KEMICNIH IZDELKOV, D.D. Inventor KOVACIC, MATEJA

There are described novel dispersible cimetidine tablets containing 30 to 90 % by weight of one of the polymorphous modifications of cimetidine A, B or C, 5 to 55 % by weight of one or more disintegrating agents, 0.05 to 5.0 % by weight of a surfactant, such as sodium lauryl sulphate together with other common adjuvants. The process for the manufacture of dispersible cimetidine tablets is effected on the basis of known methods by granulating the ingredients and by compressing the granulate to tablets. Dispersible tablets disintegrate when brought in contact with water at room temperature within less than 1 minute to yield a fine dispersion, which facilitates the oral application. Therefore such tablets are particularly suitable for certain groups of patients, especially for the aged and children. Dispersible tablets containing cimetidine possess by their improved rate of dissolution and good bioavailability.



Advantages

- Simplicity
- Response times
- Combination with other fields

ENUM:(AQIXAKUUQRKLNLD-UHFFFAOYSA-N) AND EN_AB:(gastric OR gastro)

75 results Offices all Languages all Stemming true Single Family Member false Include NPL false

Sort: Relevance Per page: 100 View: All+Image

1 / 1

Download Machine translation

1. **0108452** TREATMENT OF GASTRIC INFLAMMATORY DISEASE WITH CYTOPROTECTIVE PROSTAGLANDINS AND HISTAMINE-2 BLOCKING ANTI-SECRETORY AGENTS.

EP - 18.05.1984

Int.Class [A61K 31/415](#) Appl.No 83201551 Applicant PROCTER & GAMBLE Inventor WAGNER GREGORY STEVEN

Compositions comprising **gastric** cytoprotective prostaglandin or prostaglandin-like compounds and histamine-2 receptor blocking anti-secretory agents useful in the treatment and prophylaxis of **gastric** inflammatory conditions are disclosed. These compositions are effective in the treatment and prophylaxis of **gastro**-intestinal ulceration. They utilize levels of both prostaglandin and anti-secretory agents which are significantly lower than ordinarily required as the prostaglandin potentiates the effect of the anti-secretory agent, and minimizes the side effects which are frequently associated with the administration of prostaglandins. The method of treating and preventing **gastric** inflammatory diseases using these compositions is also disclosed.



2. **1209044** TREATMENT OF GASTRIC INFLAMMATORY DISEASE WITH CYTOPROTECTIVE PROSTAGLANDINS AND HISTAMINE-2 RECEPTOR BLOCKING ANTI-SECRETORY AGENTS

CA - 05.08.1986

Int.Class [A61K 31/557](#) Appl.No 440524 Applicant Inventor WAGNER, GREGORY S.

TREATMENT OF **GASTRIC** INFLAMMATORY DISEASE WITH CYTOPROTECTIVE PROSTAGLANDINS AND HISTAMINE-2 RECEPTOR BLOCKING ANTI-SECRETORY AGENTS ABSTRACT Compositions comprising **gastric** cytoprotective prostaglandin or prostaglandin-like compounds and histamine-2 receptor blocking anti-secretory agents useful in the treatment and prophylaxis of **gastric** inflammatory conditions are disclosed. These compositions are effective in the treatment and prophylaxis of **gastro**-intestinal ulceration. They utilize levels of both prostaglandin and anti-secretory agents which are significantly lower than ordinarily required as the prostaglandin potentiates the effect of the anti-secretory agent, and minimizes the side effects which are frequently associated with the administration of prostaglandins. The method of treating and preventing **gastric** inflammatory diseases using these compositions is also disclosed.

REPLACEMENT
there are NO DRAWINGS
il n'y a PAS DE DESSINS

3. **0814773** PECTIN LIQUID PHARMACEUTICAL COMPOSITIONS

EP - 07.01.1988

Int.Class [A61K 9/00](#) Appl.No 96908089 Applicant BOOTS CO PLC Inventor COX GILLIAN

The invention relates to a liquid composition for use in the prevention of **gastric** reflux, the composition comprising: a pectin gel raft-forming agent; a pectin, or a pharmaceutically acceptable salt thereof; a pharmaceutically acceptable metal ion component; one or more substances capable of producing a pharmaceutically acceptable gas at the physiological pH normally present in the stomach; the composition forming a gel raft in a **gastric** environment; in which the metal ion component is coated with a material to prevent the composition from forming a gel raft in a non-**gastric** environment. Preferably the composition further comprising one or more additional ingredients selected from: one or more antacid agents, one or more antibiotics, one or more anti-cholinergic agents, one or more anti-emetic agents, one or more cytoprotectants, one or more H₂ receptor antagonists, one or more local anaesthetics, one or more proton pump inhibitors and any suitable and compatible mixtures thereof.



Disadvantages

- Limited recall
- Only exact compound

Markush search: By Matching Structures

Feedback Goto Search ▾ Browse ▾ Tools ▾ Settings

CHEMICAL COMPOUNDS SEARCH ▾

[Convert structure](#) [Upload structure](#) [Structure editor](#) [Found compounds](#) [Found Markush Formulas](#)

Search type
Compound name ▾

Type an accepted name, commercial name, CAS name, IUPAC name
lansoprazole

Search for scaffold

Include enumerated Markush structures

Offices
All ▾

Reset Show in editor Exact Structure Search

Chemical structure visualization interface showing a complex molecule and search options.

Chemical Structure: A complex molecule featuring a benzimidazole ring system connected via a sulfonamide group to a pyridine ring, which is further substituted with a trifluoromethyl group.

Metadata:
InChI: InChI=1S/C16H14F3N3O2S/c1-10-13[20-7-6-14[10]24-9-16[17,18]19]8-25[23]15-21-11-4-2-3-5-12[11]
InChIKey: MJJHNNLFOKEZEW-UHFFFAOYSA-N
Molecular Formula: C16H14F3N3O2S
Molecular Weight: 369.3664 g/mol

Search Options:

- Search for scaffold
- Include enumerated Markush structures

Offices: All

Search Method Selection:

- Fuzzy and ranked substructure Search
- Fuzzy substructure Search
- Substructure Search
- Exact Search

Buttons: Reset, **Markush Search**, Substructure Search, Exact Structure Search, Evaluate

CHEMICAL COMPOUNDS SEARCH ▾

[Convert structure](#) [Upload structure](#) [Structure editor](#) [Found compounds](#) [Found Markush Formulas](#)

search results [0 hits found, 2.62% searched]

Sort by natural ▾

[1 of 1] ⏪ ⏩ 1 ⏪ ⏩ 24 ▾

Show more...

[1 of 1] ⏪ ⏩ 1 ⏪ ⏩ 24 ▾

Markush search results [0 hits found, 2.62% searched]

Offices

All

Reset

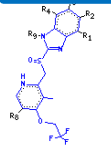
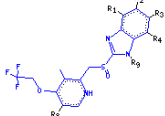
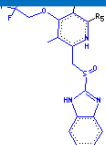
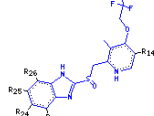
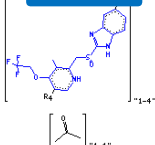
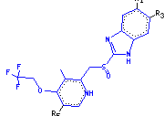
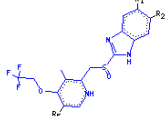
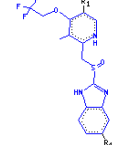
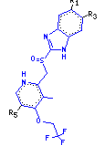
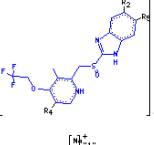
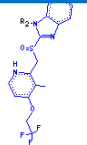
Clear all

Select all

Search

Batch

[1 of 1] 1 24

9117-08201 	9138-09401 	8238-69401 	9734-40901 	0016-85501 	0039-53701 
0040-03901 	0054-75003 	0087-15801 	0132-17102 	1070-61601 	Show more...

[1 of 1] 1 24
Markush search results (11 hits found, 69.96% searched)

Offices
All

Reset Clear all Select all Search Batch

MN:(9117-08201*5 OR 9138-09401*5 OR 8238-69401*5 OR 9734-40901*5 OR 0016-85501*5 OR 0039-53701*5 OR 0040-03901*5 OR 0054-75003*5 OR 0087-15801*5 OR 0132-17102*5 OR 1070-611

Sort: Relevance

1. **0446961**

Int.Class **A61K9/16**

The pharmaceutical carbamoylalkyl, dialkylcarbamoyl may optionally be

87 results Offices all Languages all Stemming true Single Family Member false Include NPL false

FULL QUERY

MN:(9117-08201*5 OR 9138-09401*5 OR 8238-69401*5 OR 9734-40901*5 OR 0016-85501*5 OR 0039-53701*5 OR 0040-03901*5 OR 0054-75003*5 OR 0087-15801*5 OR 0132-17102*5 OR 1070-61101*5 OR null)

2. **0423748** STABILIZED PHARMACEUTICAL COMPOSITION AND ITS PRODUCTION.

Int.Class **A61K9/16** Appl.No 90119891 Applicant TAKEDA CHEMICAL INDUSTRIES LTD Inventor MAKINO TADASHI

The pharmaceutical composition of the invention, which comprises a benzimidazole compound of the formula wherein R<1> is hydrogen, alkyl, halogen, cyano, carboxy, carboalkoxy, carboalkoxyalkyl, carbamoyl, carbamoylalkyl, hydroxy, alkoxy, hydroxyalkyl, trifluoromethyl, acyl, carbamoyloxy, nitro, acyloxy, aryl, aryloxy, alkylthio or alkylsulfinyl, R<2> is hydrogen, alkyl, acyl, carboalkoxy, carbamoyl, alkylcarbamoyl, dialkylcarbamoyl, alkylcarbonylmethyl, alkoxycarbonylmethyl or alkylsulfonyl, R<3> and R<5> are the same or different and each is hydrogen, alkyl, alkoxy or alkoxyalkoxy, R<4> is hydrogen, alkyl, alkoxy which may optionally be fluorinated, or alkoxyalkoxy, and m is an integer of 0 through 4, and a basic inorganic salt of magnesium and/or a basic inorganic salt of calcium, is physically stable.

3. **000003750431** STABILISIERTES ARZNEIMITTEL UND DESSEN HERSTELLUNG.

Int.Class **A61K31/44** Appl.No 3750431 Applicant TAKEDA CHEMICAL INDUSTRIES LTD Inventor HIRAI SHIN-ICHIRO

1. EP0446961 - STABILIZED PHARMACEUTICAL COMPOSITION AND ITS PRODUCTION



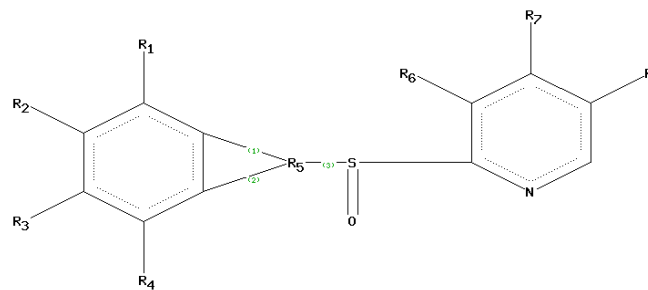
National Biblio. Data Description Claims Patent Family Compounds **Markush** Documents

PermaLink

Markush Nr.

9138-09401

Markush formula

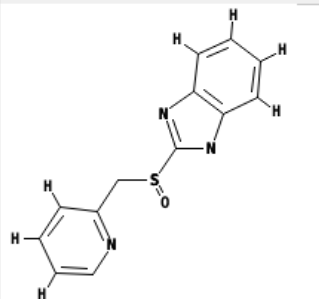


▼ Enumerated compounds

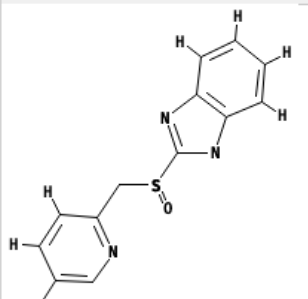
Note: These structures have been created automatically. Please use the original Markush definition in the PDF version for legal matters

1 2 3 4 5 6 7 8 9 10 >> >>>

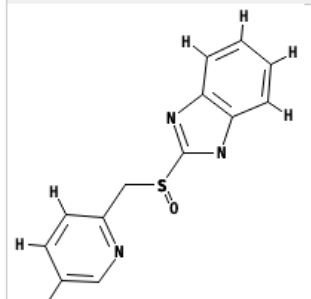
HBDFZNDMVLSTM-UHFFFAOYSA-N



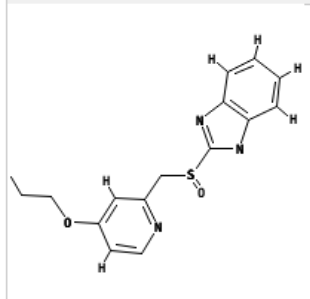
ZFUVCOUKXFRIG-UHFFFAOYSA-N



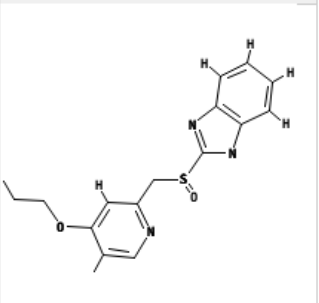
ZFUVCOUKXFRIG-UHFFFAOYSA-N



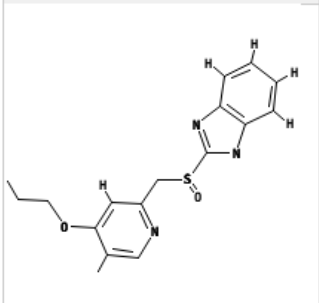
BQSRNAUDMPQYKZ-UHFFFAOYSA-N



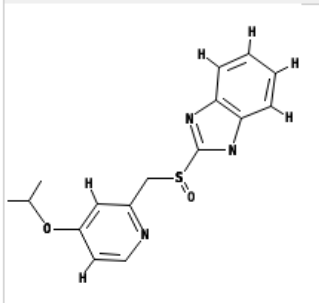
SOMRZJSTDCVDES-UHFFFAOYSA-N



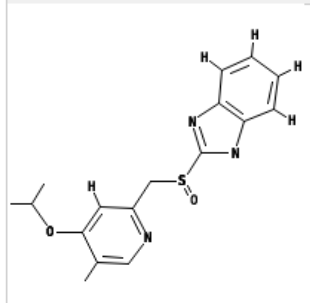
SOMRZJSTDCVDES-UHFFFAOYSA-N



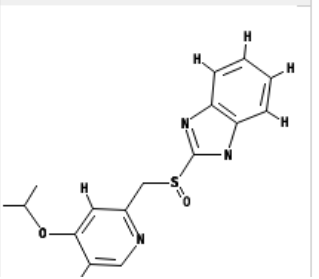
NJJRWERALDFUMA-UHFFFAOYSA-N



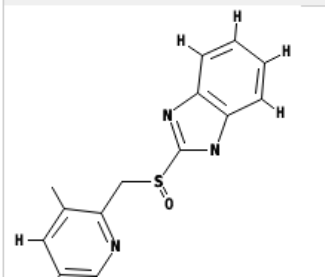
LERJWVYZVKEIPB-UHFFFAOYSA-N



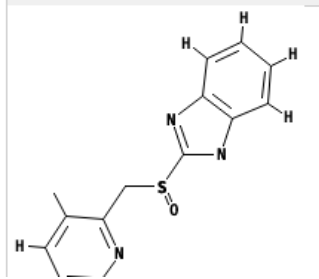
LERJWVYZVKEIPB-UHFFFAOYSA-N



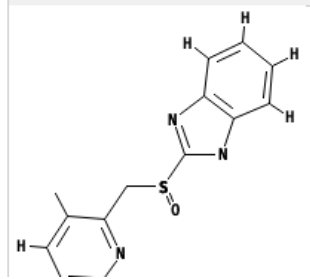
MSVPDUIRKKWSDW-UHFFFAOYSA-N



YNRXQBPXUVQHBZ-UHFFFAOYSA-N



YNRXQBPXUVQHBZ-UHFFFAOYSA-N



Advantages

- Recall
- Search scope
- Search options

Disadvantages

- Long response times
- Complex
- No repeating group

Repeating groups

- all repeating groups in the indexed Markush structures are standardized to one repetition

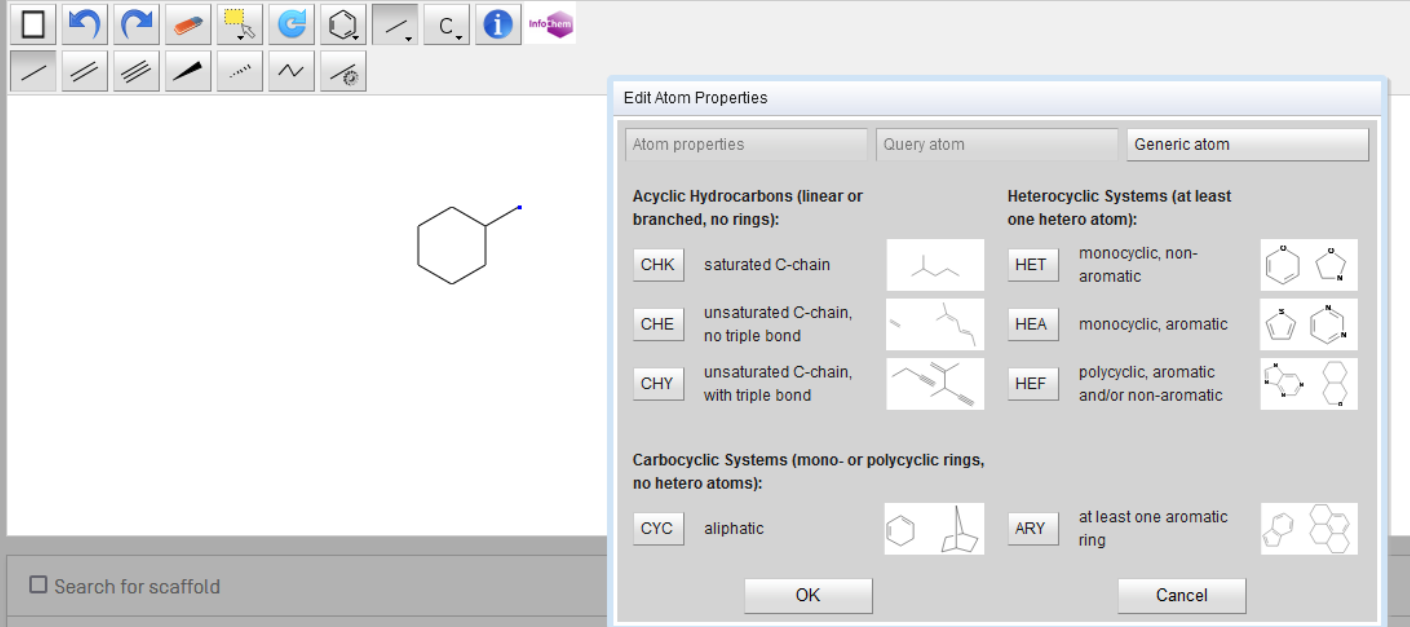


Manual edition

Variable groups

Convert structure Upload structure **Structure editor** Found compounds Found Markush Formulas

InfoChem



The image shows a chemical structure editor window. The main workspace contains a cyclohexane ring with a blue dot representing a variable group. An 'Edit Atom Properties' dialog box is open, showing options for atom properties, query atoms, and generic atoms. The dialog box is divided into three sections: Acyclic Hydrocarbons, Heterocyclic Systems, and Carbocyclic Systems. Each section contains several options with checkboxes and small chemical structure icons.

Edit Atom Properties

Atom properties Query atom **Generic atom**

Acyclic Hydrocarbons (linear or branched, no rings):

- CHK saturated C-chain
- CHE unsaturated C-chain, no triple bond
- CHY unsaturated C-chain, with triple bond

Heterocyclic Systems (at least one hetero atom):

- HET monocyclic, non-aromatic
- HEA monocyclic, aromatic
- HEF polycyclic, aromatic and/or non-aromatic

Carbocyclic Systems (mono- or polycyclic rings, no hetero atoms):

- CYC aliphatic
- ARY at least one aromatic ring

OK Cancel

Search for scaffold

Resources/Information

- PATENTSCOPE

<https://patentscope.wipo.int>

- PATENTSCOPE Team

patentscope@wipo.int

patentscope-data@wipo.int

- PATENTSCOPE Webinars

https://www.wipo.int/meetings/en/topic.jsp?group_id=312