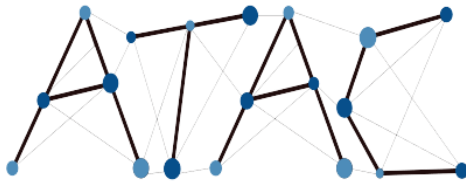


IP Offices, Global Databases and Machine Learning: What WIPO can offer you?

Side event WIPO General Assemblies

21-07-2022

Ken-Ichiro Natsume, Christophe Mazenc



Advanced Technology Application Center



WIPO's Global Databases

Find if your new idea could become a patent:

PATENTSCOPE: Search 120 million patent applications from 75 countries in 34 different languages

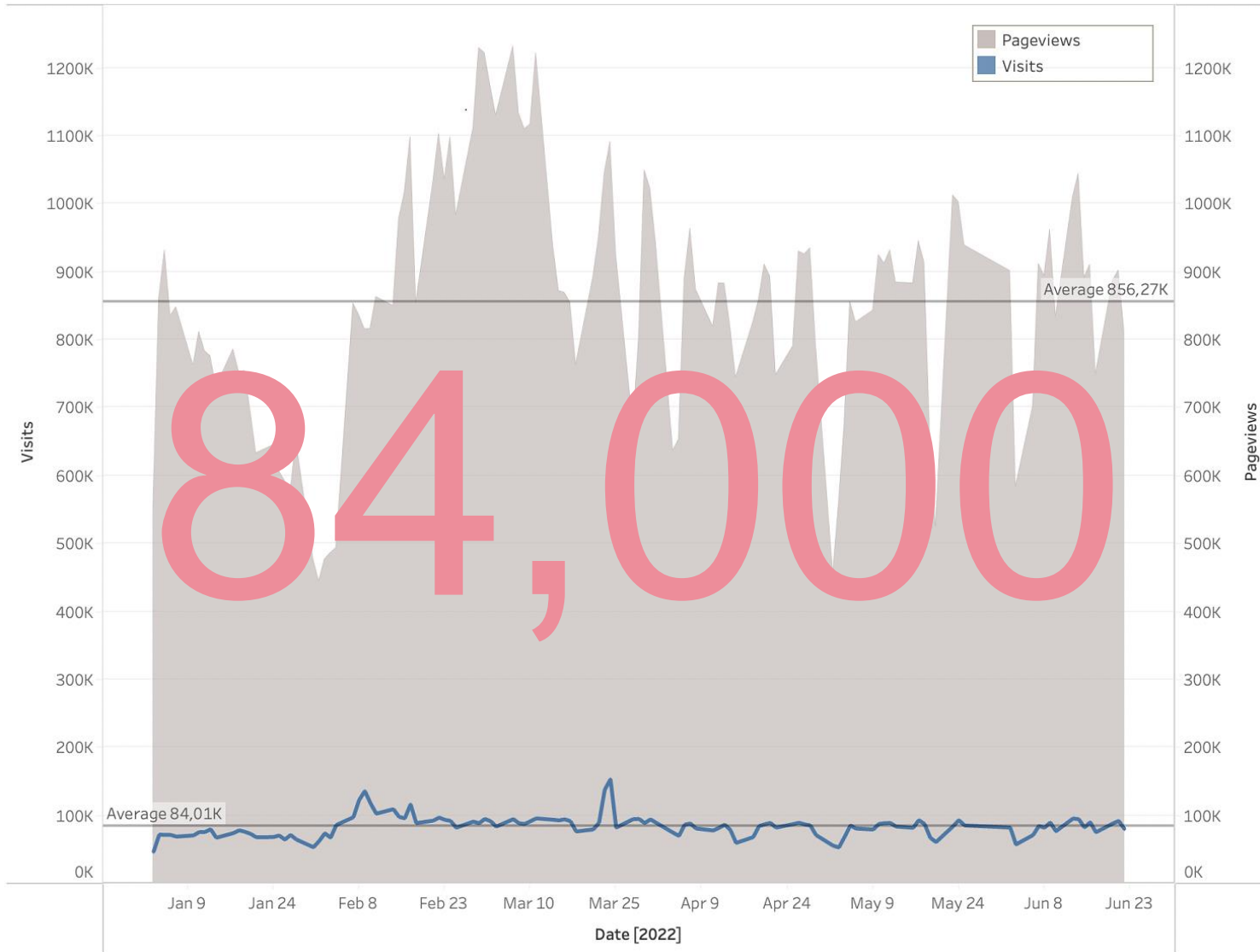
Find a name/logo as a trademark for your new business:

Global Brand Database: Search 52 million trademarks from 68 countries, as well as appellations of origins and emblems using Artificial intelligence

See what your competitors are working on:

Global Design Database: Search 14.5 million industrial designs from 36 countries

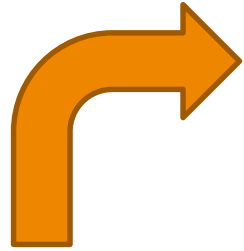
Main Metrics (Global Databases)



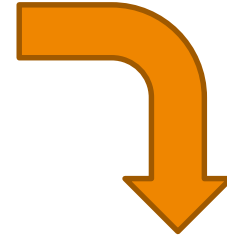
Improved visibility of national IP rights



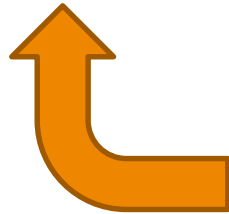
Growth in IP filings



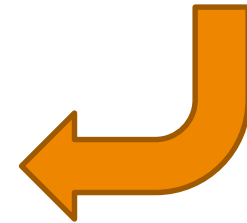
Economic growth



Stronger national IP system



**more investments,
more innovation**



Other benefits for IP offices

- Improvement of quality of national IP data (data validation procedures, data improvement procedures, authority files)
- Connect your national IP rights with other countries (PATENTSCOPE patent families, Office of Second Filing examination)
- Redirect international users to your national IP registry
- Obtain free licenses of WIPO machine learning tools that are built by putting together the data sets of PCT, Madrid and Hague data with national patent, trademark and industrial designs data

Benefits for the IP users in your country

- Available for free: only an internet connection required
- State of the art search functions available for your national IP data (chemical search, language specific keyword search, image similarity search,...)
- One stop secure search
- State of the Art Machine translation that unlocks technological knowledge transfer in the area of patents
- For national IP owners: reduce the risk of conflicts with IP rights in other countries

Joining the Global Databases



1. Signature of bilateral data exchange & technical cooperation agreement
No redistribution by WIPO
2. National IP data sent to WIPO in the format already available



Experiences by IP Offices

Mrs. María de los Angeles Sánchez Torres,
Director General, Cuban Industrial Property
Office

Mr. Anders Bruun, Patent Expert, Swedish
Patent and Registration Office

Dr Klauss Plessner, Deputy Head of Online
Services, German Patent and Trade Mark
Office

IP offices, global databases and machine learning: what WIPO can offer you



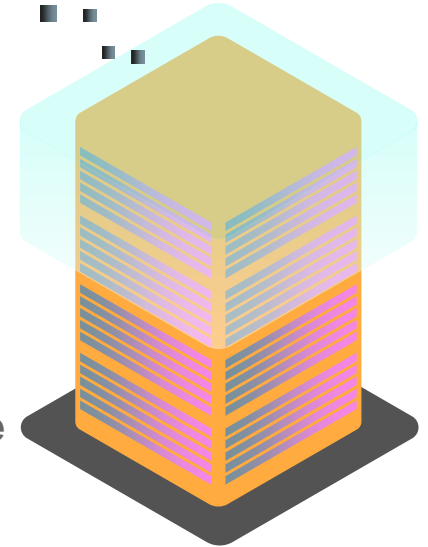
Side event – WIPO General Assemblies

July 21, 2022

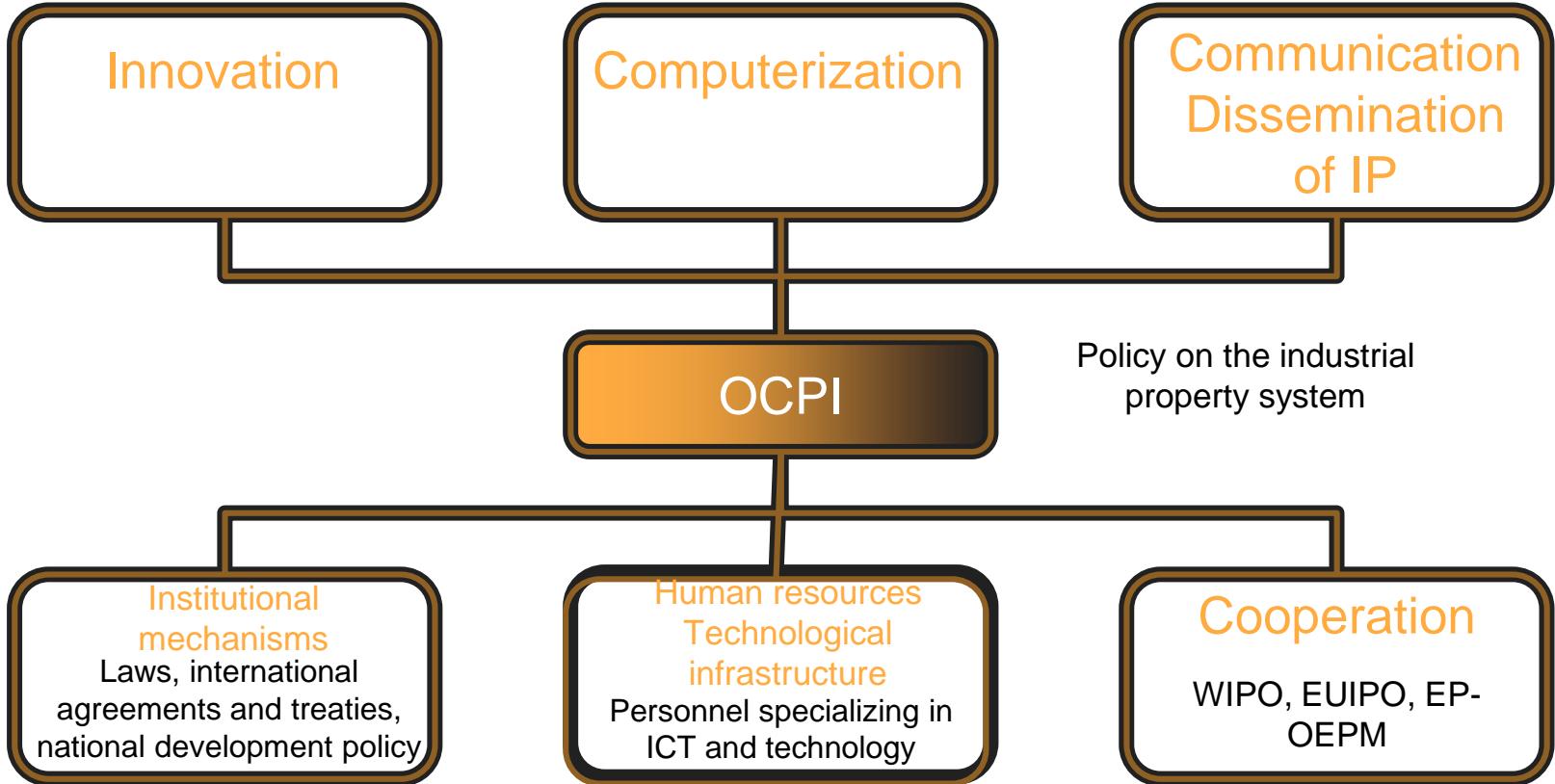
María de los Angeles Sánchez Torres

Director General, Cuban Industrial Property Office

maria@ocpi.cu



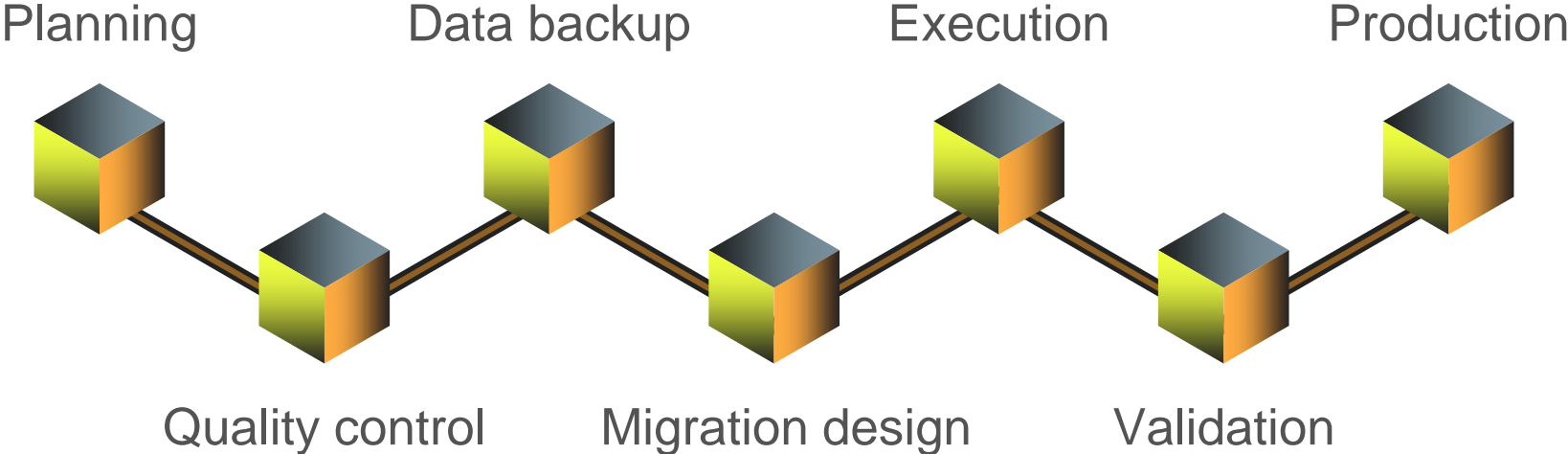
Challenges



Limitations

Risks

Data migration process – automation system for IPOs



WIPO assurance – national office

Integration of ITC tools

WIPO OCR

Tools for producing full text in XML. ST. 36

Classification service

Automatic update of Nice, Vienna, IPC and Locarno classification systems

PATENTSCOPE

Access to PCT international applications in full text format and patent documents from participating national and regional patent offices

IPAS Madrid

Notifications relating to designations made under the Madrid System. Electronic exchange of documents

WIPO Publish

Online sharing of information on official publications and other aspects of IP. Search, official publications, data extraction (XML)

WIPO File

Online services for applicants and agents

IPAS

Registration process for trademark, patent and industrial design applications. Administration, workflow design, statistics

Global Brand Database

Global Design Database

Regional databases

LATIPAT, TMview, Design View, TMclass

MILESTONES



Global Brand Database

WIPO IP PORTAL MENU Global Brand Database HELP ENGLISH LOGIN WIPO

Perform a trademark search by text or image in brand data from multiple national and international sources, including trademarks, appellations of origin and official emblems. V: 2022-07-17 22:16

Data from Bulgaria available: Close to 160,000 records
Data from Montenegro available: Over 17,000 records added
Up-to-date Data from Indonesia: Over 1.2 million records available
Up-to-date Data from Japan: Over 5 million records available
Data from Kyrgyzstan available: Over 11,000 records added
Data from Venezuela available: Over 2,000 records added
Data from Cuba available: Over 100,000 records added
Data from Zambia available: Over 20,000 records added

SEARCH BY: Brand, Names, Numbers, Dates, Class, Country

Text: e.g. apple OR apple, "apple", apple
Image class: e.g. 05.07.03, apple AND tree
Goods/Services: e.g. footwear, computer

CURRENT SEARCH: BRAND Havana club

FILTER BY: Source, Image, Type, Status, Origin, App. Year, Expiration

Pick an image: Havana Club logo
Pick a strategy: Concept, Shape, Color, Composite

CURRENT FILTER: IMAGE Shape

| Brand | Source | Status | Relevance | Origin | Holder | Holder country | Number | App. Date | Image class | Nice Cl. | Image |
|-------------|--------|--------|-----------|--------|--------------------------------------|----------------|---------|------------|-------------|----------|-------|
| HAVANA CLUB | TO TM | Active | 366 | TO | Havana Club Holding S.A. | LU | 2000489 | 2000-04-26 | | 33 | |
| Havana Club | WO TM | Active | 366 | EX | HAVANA CLUB HOLDING, société anonyme | LU | 690525 | 1998-02-27 | | 33 | |

1 - 30 / 64,777 TM results

Display: 30 per page options

FILTER BY: Source, Image, Type, Status, Origin, App. Year, Expiration

| | | | | | | | | | | | | | |
|-------|-----------|-------|-----------|-------|-----------|-------|-----------|-------|-----------|-------|-----------|-------|-----------|
| AE TM | 251,075 | AL TM | 21,143 | AU TM | 1,950,475 | BG TM | 159,955 | BH TM | 59,659 | BN TM | 53,190 | BT TM | 20,129 |
| BW TM | 40,633 | CA TM | 1,878,130 | CH TM | 477,813 | CL TM | 602,514 | CR TM | 363,803 | CU TM | 103,364 | DE TM | 2,328,503 |
| DK TM | 299,978 | DZ TM | 39,530 | EE TM | 64,667 | EG TM | 150,922 | EM TM | 2,146,392 | ES TM | 1,146,725 | FR TM | 3,112,119 |
| GE TM | 48,412 | GH TM | 31,225 | GM TM | 8,707 | ID TM | 1,392,684 | IL TM | 319,637 | IN TM | 2,720,108 | IS TM | 123,600 |
| IT TM | 1,309,846 | JO TM | 161,590 | JP TM | 5,760,794 | KE TM | 95,165 | KG TM | 11,196 | KH TM | 121,479 | KR TM | 4,279,902 |
| KW TM | 33,213 | KZ TM | 73,770 | LA TM | 56,514 | MA TM | 205,909 | MD TM | 47,935 | ME TM | 17,426 | MG TM | 20,858 |
| MK TM | 38,422 | MN TM | 85,424 | MV TM | 28,026 | MX TM | 2,028,107 | MY TM | 971,651 | MZ TM | 67,040 | NA TM | 67,185 |

Display: List Sort: Value - asc filter

Coverage – Cuba
Years: 1917–2022
103,364
registrations

- ## Benefits
- Multi-source trademark search
 - Database links: WIPO Publish – CU, TMview
 - AI-based search of image elements
 - Report generation

Global Design Database

A world-wide collection of designs data; including WIPO Hague registrations and information from participating offices.

The screenshot shows the search interface with the following details:

- SEARCH BY:** Design, Names, Numbers, Dates, Country, Priority
- Designated contracting party:** [Empty field]
- Holder country:** [Empty field]
- Applicant's contracting party:** [Empty field]
- CURRENT SEARCH:** HOLC CU
- FILTER BY:** Source, Status, Designation, Locarno class, Reg. Year, Expiration, Holder
- Table of Designation Counts:**

| Designation | Count |
|-------------|-------|
| AL Designs | 0 |
| BW Designs | 0 |
| CN Designs | 2 |
| DE Designs | 0 |
| FR Designs | 8 |
| IL Designs | 0 |
| IT Designs | 0 |
| JP Designs | 0 |
| US Designs | 0 |
| BG Designs | 0 |
| CA Designs | 0 |
| CR Designs | 2 |
| EM Designs | 55 |
| GE Designs | 0 |
| IN Designs | 0 |
| BN Designs | 0 |
| CH Designs | 0 |
| CU Designs | 585 |
| ES Designs | 0 |
| ID Designs | 0 |
| IT Designs | 0 |
- Sort by:** Reg. Date - desc
- Display:** 10 per page
- Results:**
 - CU ID: CUI/2020/000021, VANDERO, 2022-05-17, UNIVERSIDAD DE LA HABANA
 - CU ID: CUI/2020/000009, JUEGO DIDÁCTICO, 2022-04-07, Hernández Dominguez, Ariel
 - CU ID: CUI/2020/000008, APARATO PARA LA REHABILITACIÓN MOTORA EN AMBOS MIEMBROS, 2022-04-07, UNIDAD PRESUPUESTADA CENTRO DE BIOFÍSICA MÉDICA

Coverage – Cuba
Years: 1980–2021
766 registrations

FILTER BY

| Source | Status | Designation | Locarno class | Reg. Year | Expiration | Holder |
|------------|-----------|-------------|---------------|-------------------|------------|--------|
| AL Designs | 325 | BG Designs | 18,682 | BN Designs | 191 | |
| BW Designs | 203 | CA Designs | 187,202 | CH Designs | 132,858 | |
| CN Designs | 6,890,087 | CR Designs | 2,001 | CU Designs | 766 | |
| DE Designs | 1,264,654 | EM Designs | 1,531,507 | ES Designs | 479,299 | |
| FR Designs | 797,932 | GE Designs | 2,670 | ID Designs | 55,719 | |
| IL Designs | 12,249 | IN Designs | 81,015 | IT Designs | 52,576 | |
| JP Designs | 508,850 | KE Designs | 2,103 | US Designs | 1 | |

Display: List Sort: Value - asc filter

- Benefits
- Multi-source design search
 - Database links: WIPO Publish – CU, DESIGNview
 - Report generation

PATENTSCOPE global database

MENU PATENTSCOPE HELP ENGLISH LOGIN WIP

Feedback Search Browse

OF:CU

5,502 results Offices all Languages en Stemming true Single Family Member false Include NFL false

Sort: Relevance Per page: 10 View: All 1/551

1. **34563** THE INVENTION RELATES TO THE INVENTION FOR THE MANUFACTURE OF THE PLASTIC AND THE TREATMENT OF THE FIBRES CU - 20.04.1981
Int.Class **A61B 1/28** Appl.No 34563 Applicant MINISTERIO DE SALUD PÚBLICA Inventor Newton Briones Fernández
Characterised in that in order to have a greater visualization, more easily for maneuvering the surgical instruments and simplifying the electrical part, the apparatus consists of a laryngoscope of anesthesist [8] mounted on an incurved extension [1] of suitable shape and dimensions serving as a support to the aforementioned laryngoscope at one of its ends and supporting the patient by the other, with adjustable articulation and the possibility of fixing the mutual position of said elements to be adjusted according to the case.

2. **34772** PROCESS FOR PREPARING YESO AND POLVO FINO PRODUCTS CU - 24.08.1982
Int.Class **C24B 19/02** Appl.No 34772 Applicant Svend Ole Berthelsen Inventor Svend Ole Berthelsen
Compositions for the manufacture of cellular products, in cell and non cellular parts, in cellular and non cellular parts, useful for the construction, insulation and protection of high hardness and resistance to fire, heat, water and salts, also useful for the use of the soil, which comprises a hydraulic guard and additives, the following composition having: 100 parts by weight of a hydraulic guard, preferably containing 30 parts by weight or more of dehydrated gypsum, from 2 to 100 parts by weight of fine powder, preferably with a specific surface area of 4 to 75 m²/g, and water and heat resistant, 10 to 45 parts by weight, is, a minimum of water, and 0 to 1000 parts by weight of aggregates plus vultics.

3. **33390** PROCESS FOR THE PREPARATION OF COMPOUNDS ETEROIDES CU - 21.03.1970
Int.Class Appl.No 33390 Applicant VEB JENAPHARM Inventor Werner Hartmann
Process for the preparation of steroid compounds, characterized in that primary, secondary and tertiary groups as well as hydroxy phenolic alcohols of fatty alcohols of the general formula wherein the A, B, C and D rings can be variously linked and are present as connections representing C C Bonds, saturated or unsaturated bonds And R₆: H or lower alkyl (R₆ is not applicable in the case of an appropriate non saturated bond in the Basic steroid structure) R₇ acyl to C5 or benzoyl or lower alkyl to C5 or cyclopentyl R₈: Alkane or alkyl radical R₉: H or halogen R₁₀: H or OH₂ Are reacted with chloroalkane trialkyl and/or disulfoxane hexaalkyl to form hydroxy steroid silane compounds of the aforementioned formula, whereas R₅ means in this case trialkyl silane radical R, in the case of polyhydroysteroids, which are intended to mean trialkyl Silane radical and H, with the exception of those compounds containing 0 or H₂ at position 3 and simultaneously possess a double bond at position 4 or at positions 1 and 4 as well as H or lower alkyl group saturated at position 17 alpha.

Coverage – Cuba

Years: 1968–2022
4,795 registrations
2,079 images

2. **WO1998039032 - IMMUNOPOTENTIATING FORMULATIONS FOR VACCINAL USE**

PCT Biblio. Data Description Claims Drawings National Phase Patent Family Notices Documents

Start watching PermaLink

Timeline showing patent filings from 1987 to 2000. Key entries include:

- AR09886
- AT295182
- ES2247022
- EP087737
- CN1252002
- ZA1998/01887
- AU1998068077
- MY91 98002960
- WO1998/039032** (highlighted in red)
- DE000098030156
- CA2203044
- US0355414

Benefits

- Multi-source patent search
- Database links: WIPO Publish – CU, LATIPAT
- Full text search
- Chemical structure search
- Automatic translation
- Patent family
- Report generation
- Statistics

LATIPAT database

LATIPAT

Espacenet

Búsqueda de patentes
Un servicio en cooperación con la OEP

Español Portuguese English

Contacto

Cambia de país ▼

← Sobre Espacenet Otros servicios en línea de EPO ▼

Búsqueda

Resultados

★ Mi lista de patentes (0)

Historial

Configuración

Ayuda

Refinar la búsqueda → Página de resultados 1 → ES2894075 (T3) → Familia página 1

ES2894075 (T3)

Datos bibliográficos

Descripción

Reivindicaciones

Mosaicos

Documento original

Documentos citados

Documentos citantes

Situación Jurídica de INPADOC

Familia de patentes INPADOC

Ayuda rápida

- ¿Se puede exportar esta lista?
- ¿Qué pasa si pulso en "Descargar portadas"?
- ¿Se puede ordenar la lista?
- ¿Qué pasa si pulso en el icono de la estrella?
- ¿Qué es una familia de patentes?
- ¿Qué pasa si se marca la casilla de "mostrar citas"?
- ¿Qué es una familia de patentes de INPADOC?
- ¿Son equivalentes todos los documentos de una familia de INPADOC?
- ¿Por qué se publica un mismo documento varias veces en un mismo país?

Lista de familia: ES2894075 (T3) — 2022-02-11

RSS: family dossiers

Seleccionar todos (0/25)

☰ Compactar

📄 Exportar (CSV | XLS)

↓ Descargar primeras páginas

🖨 Imprimir

→ CCD (Common Citation Data)

26 solicitud(es) para: ES2894075 (T3)

1 2 ▶
page 1

Ordenar por

Orden de clasificación

mostrar citas

1. Composiciones de vacunas divalentes y el uso de las mismas para el tratamiento de tumores

| | | | | | |
|--|--|---|--------------------------|--|--|
| ★ Inventor: SANCHEZ RAMIREZ BELINDA YGLASIAS RIVERA ARIANNA (+2) | Solicitante: CT INMUNOLOGIA MOLECULAR | CPC: A61K2039/54 A61K2039/545 A61K2039/55505 (+10) | IPC: A61K39/00 | Información de publicación: ES2894075 (T3) 2022-02-11 | Fecha de prioridad: 2013-08-02 |
|--|--|---|--------------------------|--|--|

2. COMPOSICIONES VACUNALES BIVALENTES Y SU USO PARA LA TERAPIA DE TUMORES

| | | | | | |
|--|---|---|--|---|--|
| ★ Inventor: BELINDA SNCHEZ RAMREZ [CU] ARIANNA YGLASIAS RIVERA [CU] (+2) | Solicitante: CENTRO DE INMUNOLOGIA MOLECULAR [CU] | CPC: A61K2039/54 A61K2039/545 A61K2039/55505 (+10) | IPC: A61K31/7032 A61K39/40 A61P35/00 | Información de publicación: AR097172 (A1) 2016-02-24 | Fecha de prioridad: 2013-08-02 |
|--|---|---|--|---|--|

3. Divalent vaccine compositions and the use thereof for treating tumours

TMview database

Oficinas de marcas: CU: Territorios: CU:

Nombre de la marca:

Contiene ▾

Havana Club

×

BUSCAR

Guardar esta búsqueda

Compartir por correo

WIPO Global Brand DB

Exportar Comparar Avisos Etiquetas

<< 1-24 de 24 >>

Vista de estadísticas

Vista de lista
Vista ampliada
Vista de galería

Editar columnas

ELIMINAR
FILTROS

APLICAR

Oficinas

Cuba-OCPI (24)

Productos y servicios

18 Cuero y cuero de imit... (1)

21 Utensilios y recipiente... (1)

25 Prendas de vestir, calz... (3)

Mostrar los 8 resultados

Códigos de Viena

01.01 ESTRELLAS, COME... (1)

01.05 TIERRA, GLOBOS T... (1)

01.17 MAPAS, GEOGRAFL... (1)

Mostrar los 19 resultados

| <input type="checkbox"/> | Representación gráfica | Nombre de la marca ▾ | Fecha de solicitud ▾ | Productos y servicios ▾ | Situación de la marca ▾ | Oficina de marca... | Número de solicitud ▾ |
|----------------------------|------------------------|----------------------|----------------------|-------------------------|-------------------------|---------------------|-----------------------|
| ▾ <input type="checkbox"/> | - | HAVANA CLUB | 22/06/1998 | 21 | Registered | Cuba-OCPI | CUM1998000961 |
| ▾ <input type="checkbox"/> | - | HAVANA CLUB | 18/07/1991 | - | Registered | Cuba-OCPI | CUN1991000004 |
| ▾ <input type="checkbox"/> | - | HAVANA CLUB | 22/06/1998 | 18 | Registered | Cuba-OCPI | CUM1998000960 |
| ▾ <input type="checkbox"/> | - | HAVANA CLUB | 03/02/1983 | 33 | Registered | Cuba-OCPI | CUM1208464 |

DESIGNview database

ELIMINAR FILTROS

APLICAR

Oficinas

Cuba-OCPI (1452)

Clasificación de Locarno

02.02 Prendas de ro... (27)

02.03 Artículos de so... (12)

02.04 Calzados, calc... (12)

[Mostrar los 40 resultados](#)

Estado del dibujo o modelo

Application published (19)

Design lapsed (1286)

Design surrendered (1)

[Mostrar los 5 resultados](#)

Nombre del titular

| <input type="checkbox"/> | Dibujo o modelo | Indicación del producto ▾ | Oficina de dibujos y modelos ▾ | Número de solicitud ▾ | Fecha de presentaci... | Estado del dibujo o modelo ▾ | Clasificación de Locarno ▾ |
|----------------------------|--|---|--------------------------------|-----------------------|------------------------|------------------------------|----------------------------|
| ✓ <input type="checkbox"/> |  | ESTUCHE PARA LOS EQUIPOS DEL EXPERIMENTO PERCEPCION | Cuba-OCPI | CU1980000056 | 12/12/1980 | Design lapsed | 03.01 |
| ✓ <input type="checkbox"/> |  | ESTUCHE PARA EL EQUIPO MECÁNICO PARA LA DETERMINACIÓN DE LAS CARACTERÍSTICAS DE EXACTITUD Y TIEMPO DE COORDINACIÓN DE LAS MANOS CON VISIÓN... | Cuba-OCPI | CU1980000055 | 12/12/1980 | Design lapsed | 03.01 |
| ✓ <input type="checkbox"/> |  | TRACTOR DE RUEDAS PARA TODOS LOS FINES EN COSECHAS EN HILERA | Cuba-OCPI | CU1981000063 | 09/06/1981 | Design lapsed | 12.09 |
| ✓ <input type="checkbox"/> |  | MEDIDOR LÓGICO | Cuba-OCPI | CU1981000064 | 02/07/1981 | Design lapsed | 10.04 |
| ✓ <input type="checkbox"/> |  | RADIO GRABADOR | Cuba-OCPI | CU1981000065 | 08/07/1981 | Design surrendered | 14.01, 14.03 |

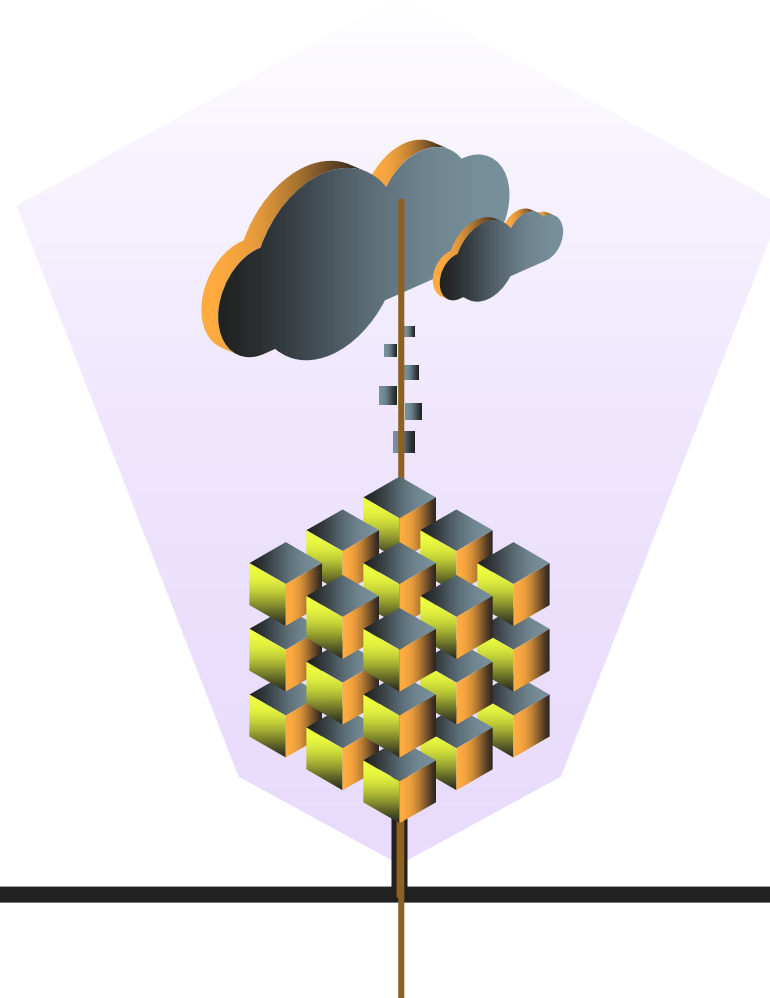
Conclusions

- **Industrial Property Administration System (IPAS)**
- **Flexibility (adaptation to domestic legislation)**
- **Integration with global and regional databases**
- **Integration of WIPO central services**
- **Use of WIPO standards for information exchange**
- **Technical assistance**
- **Technology transfer**
- **Incorporation of future developments**
- **Low resources**
- **Minimal risk**

Challenges

Digital transformation

Leveraging developments in the cloud



Better integration with global systems

Building national capacities and competencies



Thank you





Experiences by IP Offices

Mrs. María de los Angeles Sánchez Torres,
Director General, Cuban Industrial Property
Office

Mr. Anders Bruun, Patent Expert, Swedish
Patent and Registration Office

Dr Klauss Plessner, Deputy Head of Online
Services, German Patent and Trade Mark
Office



Experiences of the WIPO OCR solution at PRV

Anders Bruun 2022-07-21

PRV in brief

- Around 350 employees in Stockholm and Söderhamn
- The patent division is located in Stockholm and has around 150 employees, of which around 110 are examining patent engineers
- We examine around 2200 national applications per year and around 900 PCT applications.



Photo: Anna Fangvist



Photo: Yvonne Eriksson

Background

The EPO "Quality at Source" project (2017-2019) included several requirements for member states:

- Complete data containing all relevant bibliographic elements, for example citations
- Timely and standard-compatible data
- Authority files of published documents
- The biggest challenge: Structured full text from patent documents



PRV
SWEDISH
INTELLECTUAL
PROPERTY OFFICE

The WIPO OCR solution

- Proposed by the EPO and used by other EPO member states
- Produces results that are accepted by EPO
- Made available to PRV through an informal bilateral agreement with WIPO to deliver the data for inclusion in PatentScope



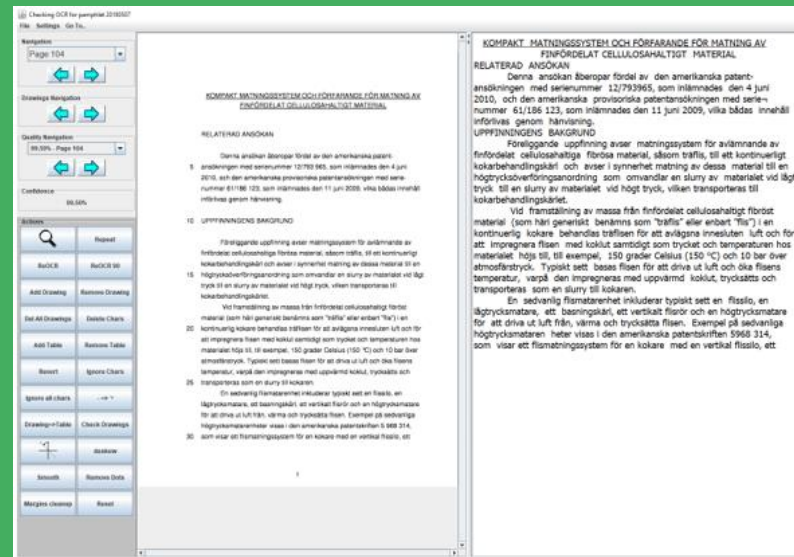
Training and installation

- Training session at WIPO for two persons in May 2018
- Installation package and adaptations for Swedish document kinds and languages were provided by WIPO
- Testing and development of an office-internal manual started testing in May 2018
- Production data to EPO from October 2018
- Production data to WIPO from June 2019
- Backfile to January 2018 processed



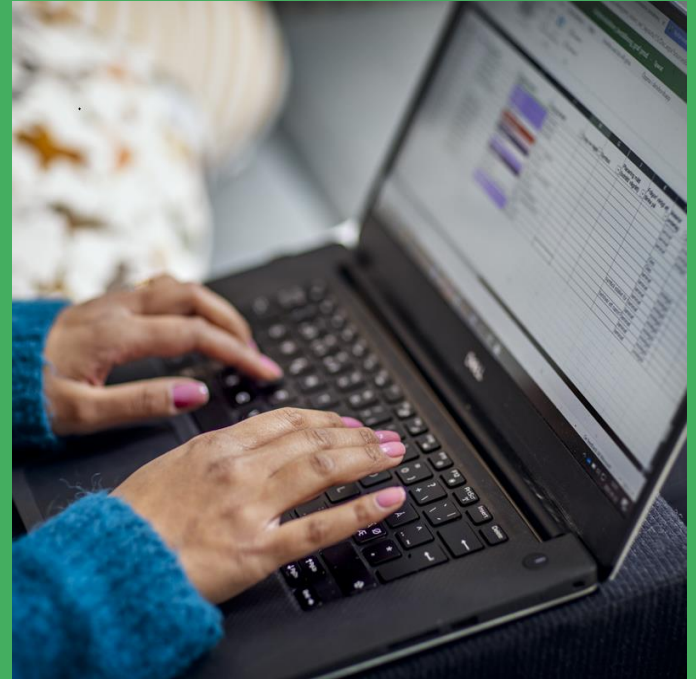
How does it work?

- PDF documents are converted to TIF and broken up into single pages
- OCR treatment and generation of binary files from TIFs
- Proofreading in a specially developed application – for example correction of errors and identification of embedded figures
- Documents reassembled from the single pages
- Generation of final XML and HTML result files



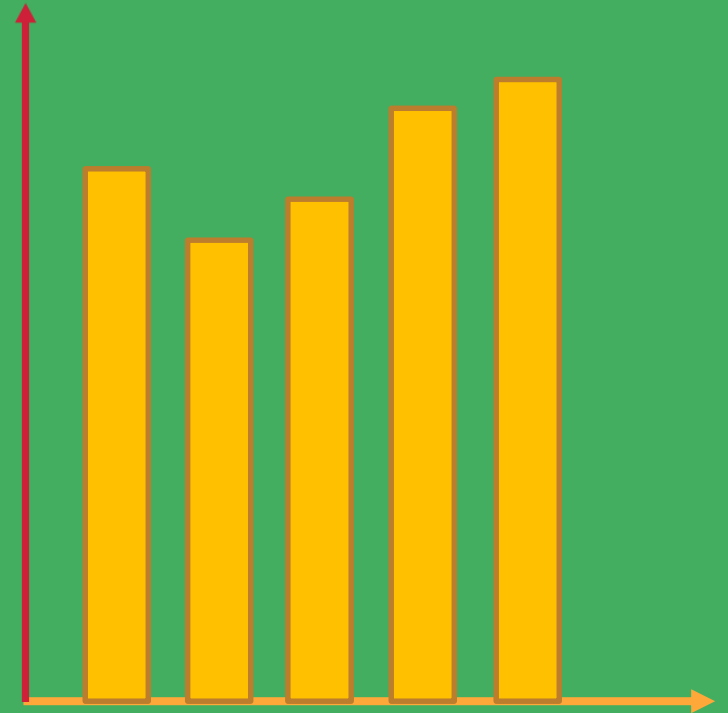
Experiences

- A very clever package with many features that are specially developed for patent documents
- Mainly trouble-free operation
- Some problems with updates and cache handling, caused by the different setups at WIPO and PRV
- WIPO staff has been extremely supportive and helpful!



Some figures

- PRV publishes around 2,200 documents per year, totalling around 60,000 pages
- The regular proofreading work is performed by two persons who take turns
- An average weekly publication batch of 1200 pages takes less than half a week's work to process for one person
- Result files are delivered monthly via FTP



Advantages

- The full text of SE documents is searchable and translatable in PatentScope
- The full text of SE documents is searchable and translatable in Espacenet and in EPO's search systems
- The full text of SE documents has been made available for download from PRV's Open Data Portal



Thank you !



Experiences by IP Offices

Mrs. María de los Angeles Sánchez Torres,
Director General, Cuban Industrial Property
Office

Mr. Anders Bruun, Patent Expert, Swedish
Patent and Registration Office

Dr Klauss Plessner, Deputy Head of Online
Services, German Patent and Trade Mark
Office



German Patent
and Trade Mark Office

DPMA's Experiences with WIPO Global Databases

Side event WIPO General Assemblies

21.07.2022

Klaus Plessner
German Patent and Trade Mark Office

WIPO Translate – Motivation

- DEPATIS database (status in 2020)
 - More than 40 Mio full text documents from DE, US, EP, FR, GB, ...
 - But: No full text documents from CN, JP and KR
- The Problem
 - In 2019 CN, JP and KR received 65 percent of the world's patent applications
 - Examiners had to search in external databases for Asian patents
 - Use of external databases generally causes loss of efficiency and data protection issues

WIPO Translate – Project Objectives

- Full access to Asian patent literature
 - Bulk translation enables full text search
 - Machine translation copes with the enormous amount of documents (over 60 Mio)
- Use of WIPO Translate
 - Analysis of translations should determines the best software
 - We tested products from WIPO, EPO and Google
 - Test criterium: How much of the translated features is comprehensible to a person of ordinary skill in the art?
 - Further criteria: OS, training data, languages, price

WIPO Translate – Realization

- **First Stage (Q1 2021 to Q1 2022)**
 - **1 Server with 4 GPUs:** Intel Xeon Gold 6130 (192 GB RAM, 60 Cores) with Nvidia Quadro GV100 GPU (4 GPUs, 32 GB)
 - **2 Servers with 4 GPUs each:** Intel Xeon Gold 6230 (192 GB RAM, 80 Cores) with Nvidia Quadro GV100 GPU (4 GPUs, 32 GB)
 - **Medium Throughput of 1 Mio pages/day**

- **Second Stage (from Q2 2022)**
 - **2 additional Servers with 4 GPUs each:** AMD EPYC 7763 (1 TB RAM, 256 Cores) with Nvidia A100 (4 GPUs, 80 GB)
 - **Overall medium Throughput of 1,7 Mio pages/day**

WIPO Translate – Status Today

- Machine translation completed so far
 - Translation is done backwards in time (starts with new documents)
 - CN: 31.1 Mio of 36.9 Mio documents
 - JP: 14.3 Mio of 27.8 Mio documents
 - KR: none
- 1st translation round completed by end of 2022
 - CN: completion of translation expected in August
 - JP: 13.5 Mio documents (from before 1994)
 - KR: 6.7 Mio documents

WIPO Translate – Further Steps

- Regular translations
 - The translation software is continuously improved
 - To take advantage of the improvement, the data stock will be regularly retranslated
- Expansion of stock
 - Asian WO documents will be added next

WIPO Translate – Feedback

- Benefits for patent examiners
 - Full text search in Asian patent documents
 - Full functionality of DEPATIS (highlighting, search strategies)
 - No need to use external databases
 - No need for additional trainings
- Cooperation with WIPO team
 - Installation support, optimization, new translation models
 - Excellent communication and support

TM Image Similarity Search – Architecture

- Web Service input data
 - An image-file has to be specified
 - The image may be combined with further criteria (data origin DE/WO/EM, Nice class, image class, application date, registration date, search strategy)
- Web Service output data
 - The answer contains a list of trademarks sorted by relevance
- Integration in DPMAregister
 - DPMAregister GUI contains a search form and displays the hit list

TM Image Similarity Search – Feedback

- Web Service implementation phase
 - WIPO offered a 1st version and added features according to DPMA's suggestions
 - Support and communication were excellent
- Production and improvement
 - Trademark examiners have approved the quality of results
 - Maximum number of results will be increased



German Patent
and Trade Mark Office

DPMA's Experiences with WIPO Global Databases

Side event WIPO General Assemblies

21.07.2022

Klaus Plessner
German Patent and Trade Mark Office

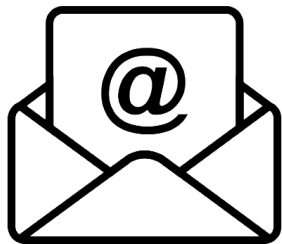
Q&A - Brainstorming



- Possible international collaboration to produce patent full text backfiles for offices where it is not available?
- Suggestions to increase the collaboration level between your office, WIPO and other offices on data quality and machine learning?
- Other use cases for applying Machine Learning to facilitate IP administration procedures in the future?

Machine-learning WIPO tools

- PATENTSCOPE OCR suite
- WIPO Translate
- Global Brand Database Image Similarity Search API for trademarks (for the trademarks of your jurisdiction)
- ATAC IPC Classifier
- Vienna Classification Assistant (public web interface)



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