

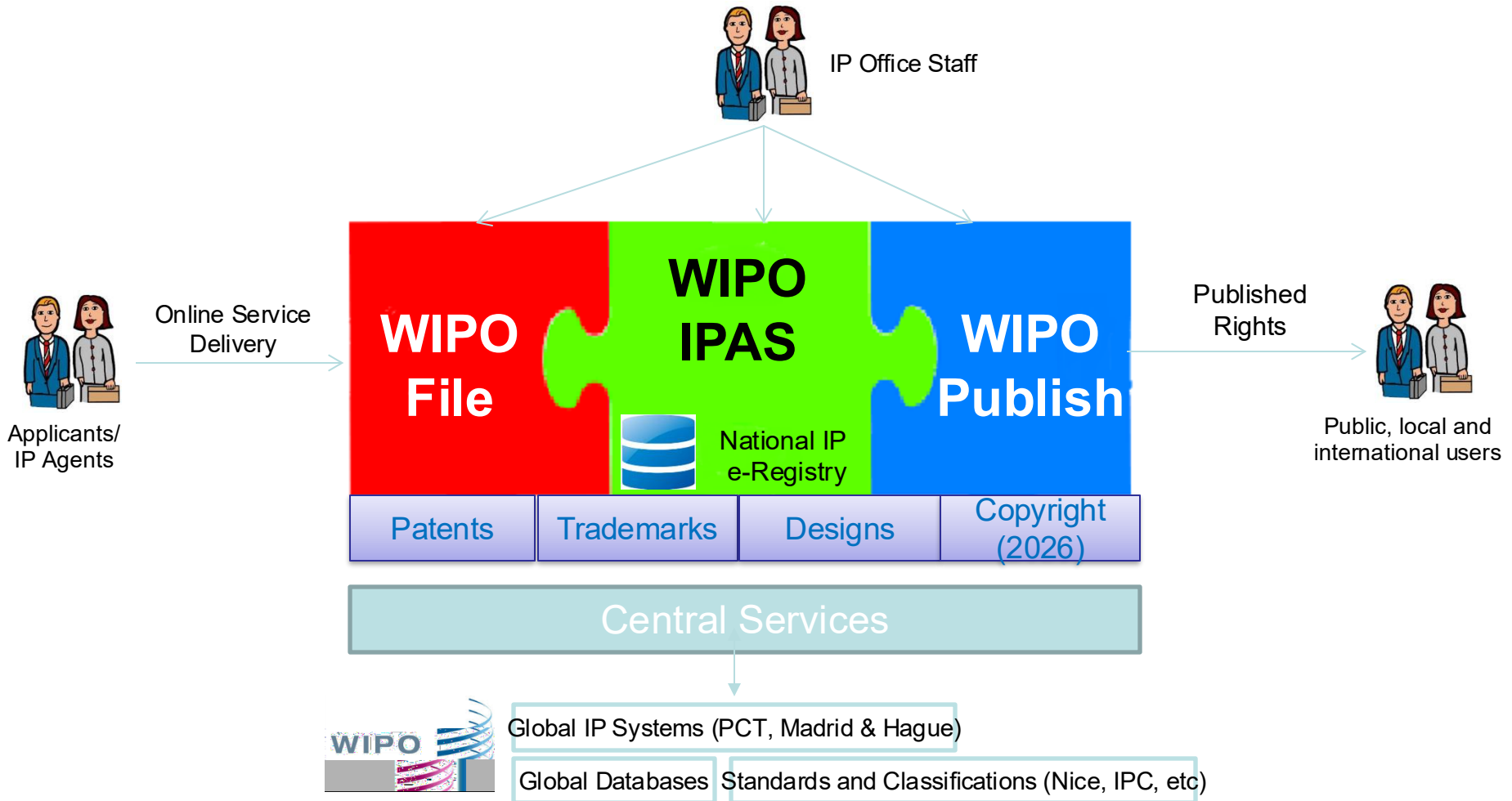


WIPO Support for IP Office Digital Transformation

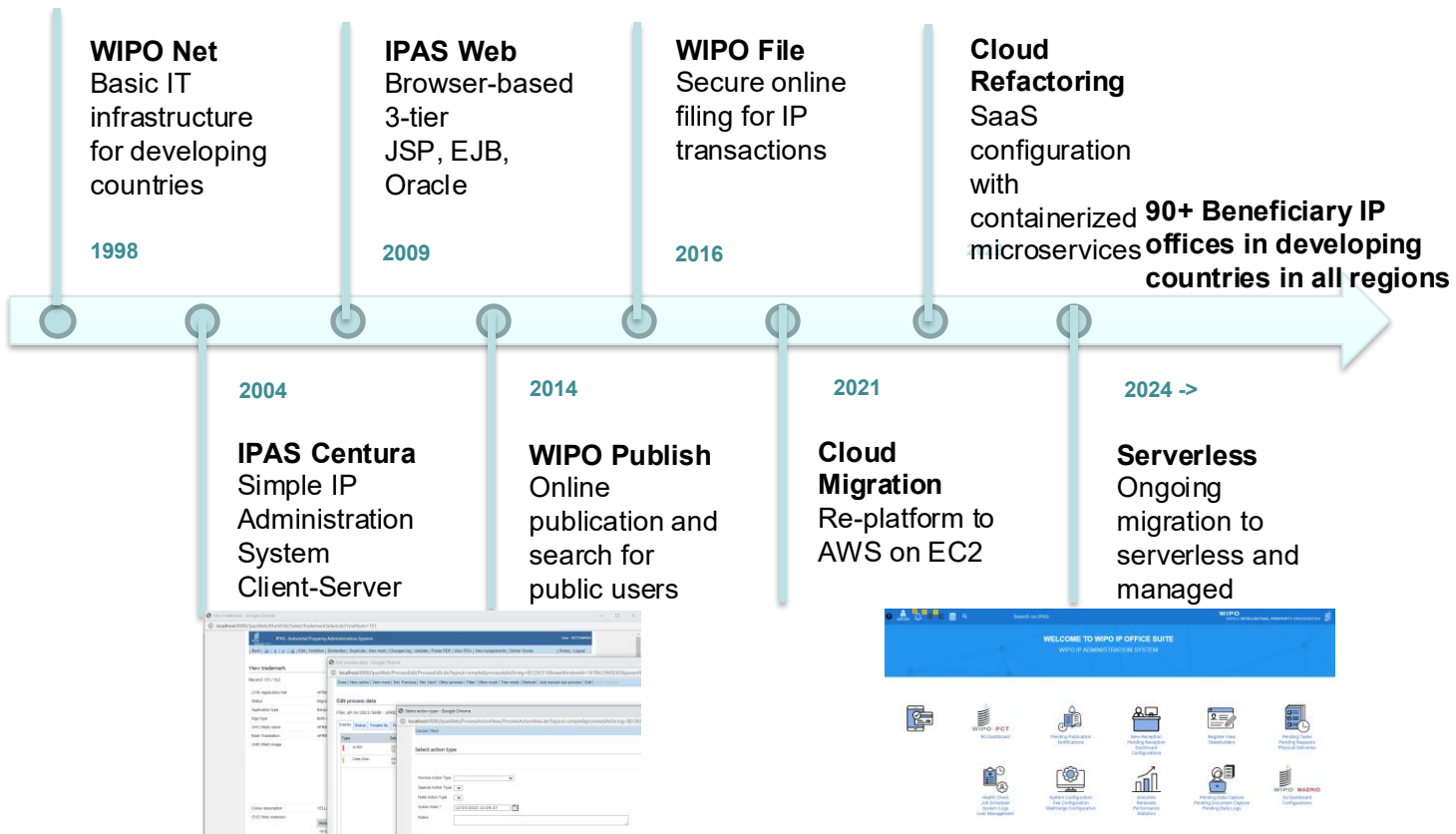
William Meredith
IP Office Business Solutions Division

WIPO'S PLATFORM FOR IP OFFICES

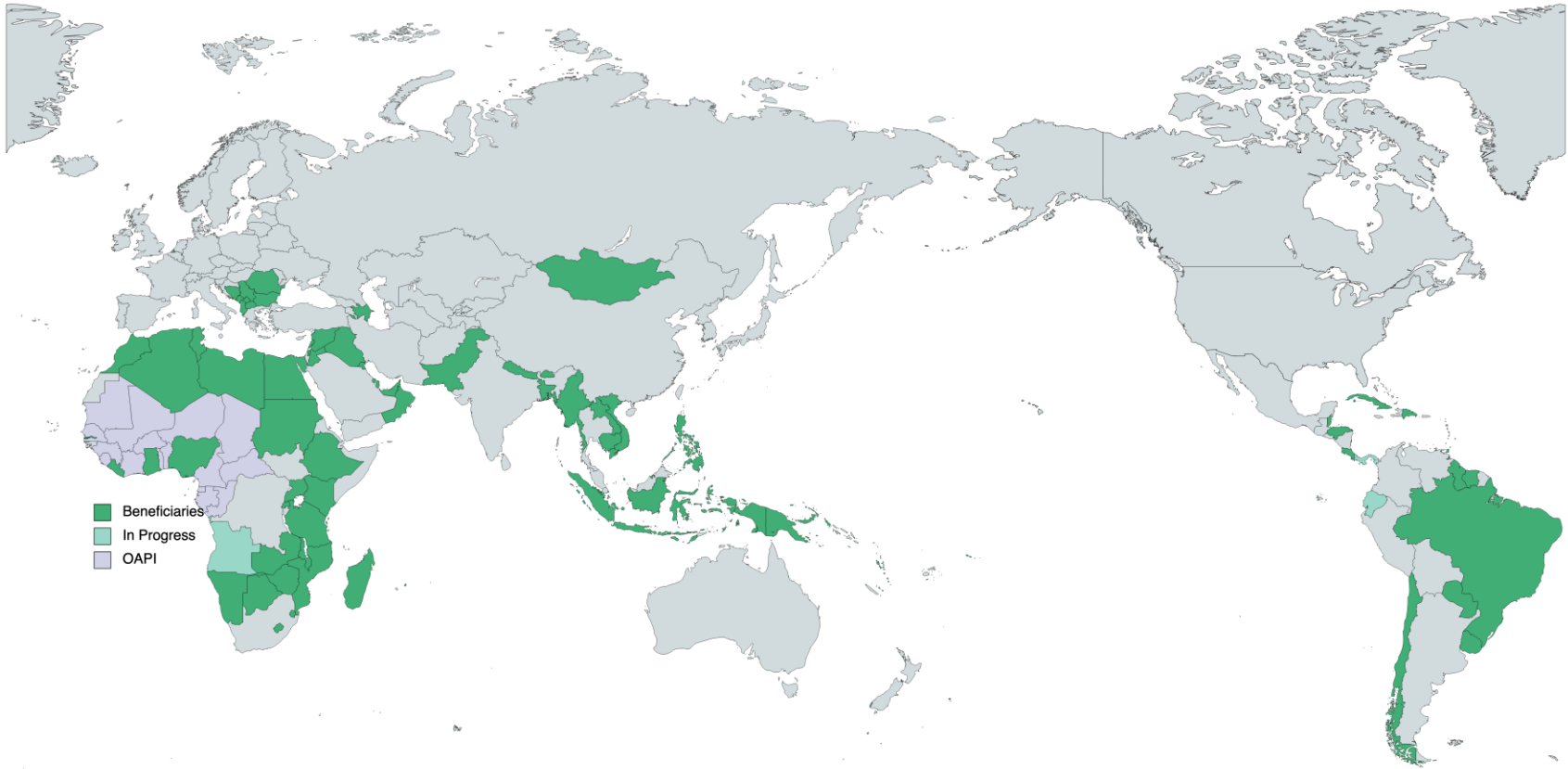
WIPO's IP Office Business Solutions



The Journey – 1998 to 2025



Global Coverage



90+ Beneficiary IP Offices
OAPI=African Regional IP Office with 17 Member States

Created with mapchart.net

Digital Transformation for IP Offices – Business Drivers

Customer Orientation

Effective & Efficient IP Office

Online Service
Delivery

Service Redesign

Added Value Services

Fully Digital Process

Quality Metrics

Resilient and Highly
Available

Data Quality and Modern Infrastructure

Challenges

Digital Operations

- Optimization of business processes
- Fully digital and online registries
- Reduce pendency and increase quality

User-Oriented Services

- Mobile, user friendly
- Business intelligence, analytics
- Filing assistants – smart digital tools
- Integration with national/regional e-business and e-government services (identity, payment, etc)

New Technologies

- Search and Examination tools (AI)
- Benefit from cloud technologies
- B2B integration

Enablers

- WIPO solutions must work for 90 beneficiaries
- Solutions are free/open source
- Cloud strategy – security, resilience, improved service delivery

Strategies

Digital Operations

- Continue to enhance WIPO products to enable fully digital IP offices
- Generic solutions for integration with national e-business and e-government solutions

User-Oriented Services

- Products mobile-enabled from day 1
- Business intelligence and customer portfolios in IP Register
- Enable more seamless access to filing, payment, etc via IP Register

New Technologies

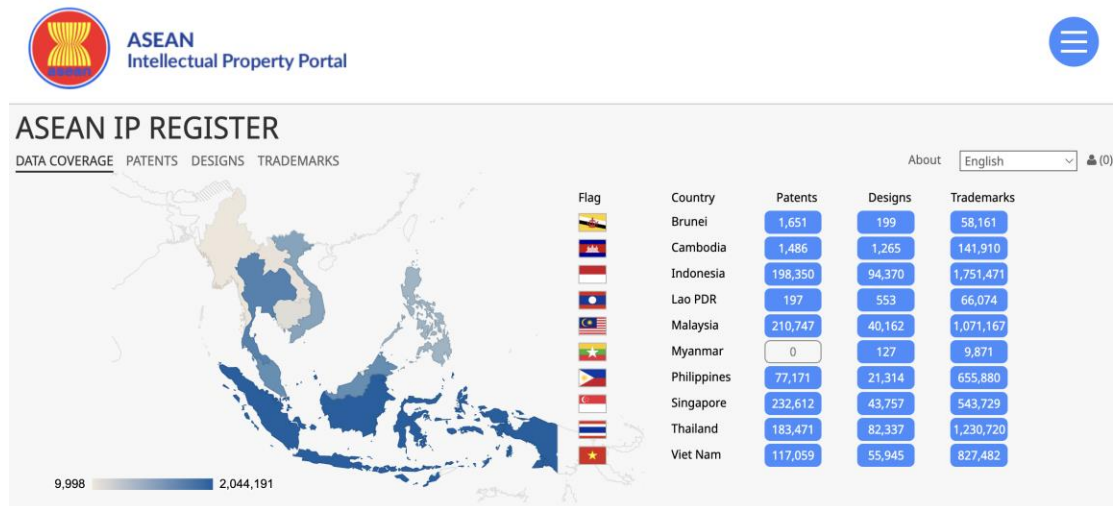
- Evaluate options and adopt proven solutions
- Benefit from cloud technologies, e.g. managed services
- B2B integration through APIs

Enablers

- WIPO solutions must work for 90 beneficiaries
- Solutions are free/open source
- Cloud strategy – security, resilience, improved service delivery

USER ORIENTED SERVICES

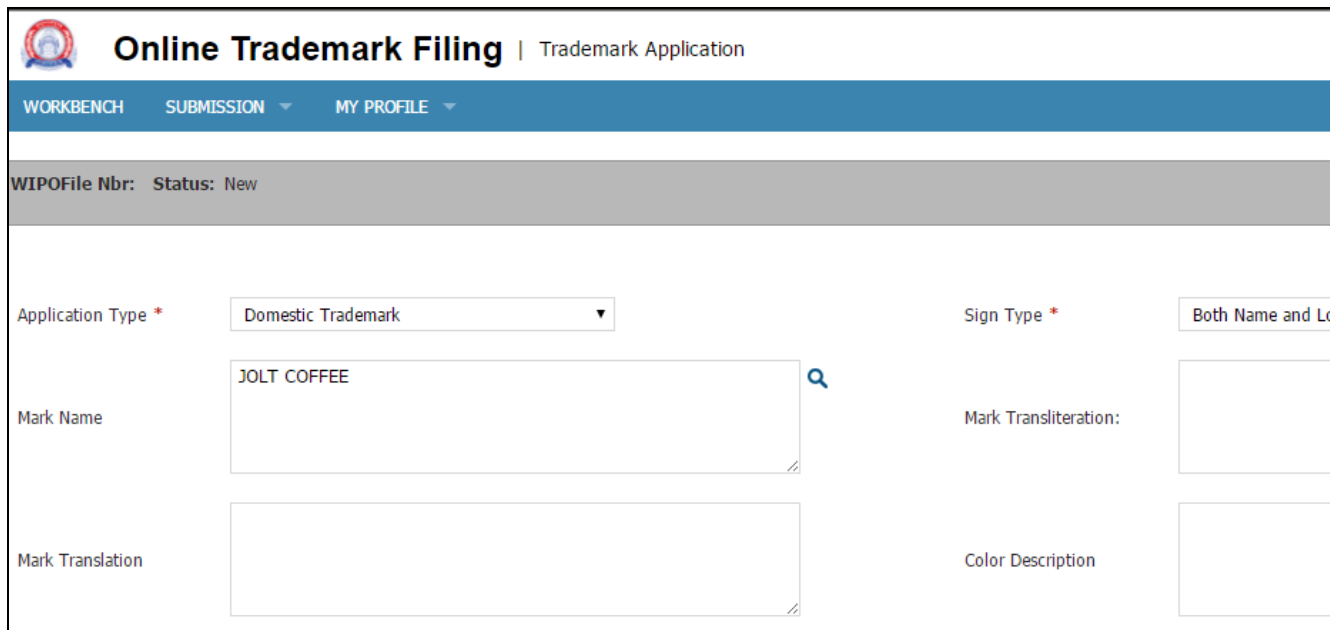
User-Oriented Services



In Progress

- Mobile enabled.
- Portfolio view.
- Business intelligence and analytics.

User-Oriented Services



The screenshot displays the 'Online Trademark Filing' interface. At the top, there is a navigation bar with 'WORKBENCH', 'SUBMISSION', and 'MY PROFILE' options. Below this, a grey bar shows 'WIPOFile Nbr: Status: New'. The main form area contains several fields: 'Application Type' (set to 'Domestic Trademark'), 'Mark Name' (containing 'JOLT COFFEE'), 'Mark Translation', 'Sign Type' (set to 'Both Name and Log'), 'Mark Transliteration', and 'Color Description'. A search icon is visible next to the 'Mark Name' field.

In Progress

- Mobile enabled.
- Integration with local payment systems.
- User friendly.

NEW TECHNOLOGIES

Challenges and Opportunities for Developing Country IP Offices

Challenges

- Commercial solutions are expensive and complex to integrate.
- Free solutions are general-purpose and not adapted for IP.
- Customized AI solutions are expensive and risky.
- Lack of capacity and infrastructure to support advanced technologies.

Opportunities

- Not constrained by old ways of working.
- People ready to adopt new technologies and new ways of working.
- “Leapfrogging”



AI for IP Office Operations

■ Promising Domains of AI Application:

- Patentability prior art search
- Trademark similarity search

■ Already Available:

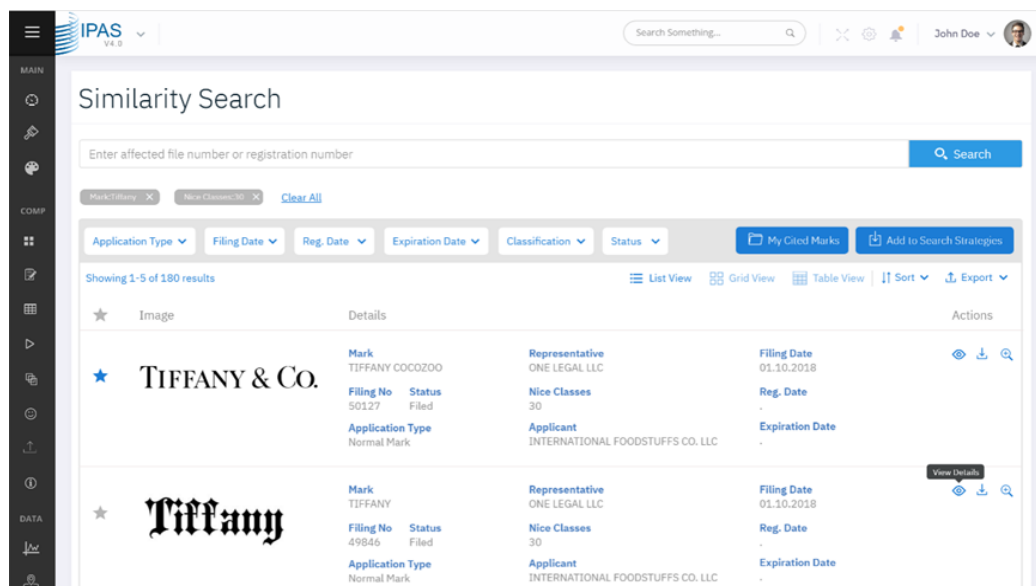
- Classification (IPC, Nice, Vienna, Locarno)
- Translation

Similarity Search

15

Overall objective: “likelihood of confusion”

Aspects of Similarity: visual, phonetic, conceptual, intended purpose, etc



1-Click Similarity Search: find related trademarks based on classification, phonetic similarity, etc.

AI-based Similarity Search: include logo similarity and similarity of goods and services. What is “likelihood of confusion” to a machine???

Patentability

Overall objective: “Determine whether a patent is anticipated by the prior art. Non-obvious to a person skilled in the art...”

Traditional Approach: Classify patents (IPC) and search by classification + keyword

(12) NACH DEM VERTRAG ÜBER DIE INTERNATIONALE ZUSAMMENARBEIT AUF DEM GEBIET DES PATENTWESENS (PCT) VERÖFFENTLICHTE INTERNATIONALE ANMELDUNG

(19) Weltorganisation für geistiges Eigentum
Internationales Büro

(43) Internationales Veröffentlichungsdatum
07. Oktober 2021 (07.10.2021)

WIPO/PCT
WO 2021/197800 A1

(51) Internationale Patentklassifikation:
B62M 64/00 (2018.01)

(21) Internationales Aktenzeichen: PCT/EP2021/056239 (74) Anwalt: TERPATENT PATENTANWÄLTE TER SMITTEN EBERLEIN VAN HOOF RÜTTEN DAUBERT PARTNERSCHAFTSGESSELLSCHAFT MBH, Burgunderstr. 29, 40549 Düsseldorf (DE)

(22) Internationales Anmeldedatum:
11. März 2021 (11.03.2021)

(25) Einreichungssprache: Deutsch (81) Bestimmungssprache (sofern nicht anders angegeben, für jede verfügbare nationale Schutzrechte): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GG, GM, GT, HN, HR, HU, IL, IN, IR, IS, IT, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LV, MA, MD, ME, MG, 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, ST, SV, SY, TH, TJ, TM,

(30) Angaben zur Priorität:
2019/212.5 93, April 2020 (03.04.2020) EP

(71) Anmelder: AMPRIO GMBH [DE/DE]; Altfeld-Pieburg-Str. 1, 41460 Neuss (DE)

(72) Erfinder: MISGELD, Berno Johannes Engelbert; c/o Amprio GmbH, Altfeld-Pieburg-Str. 1, 41460 Neuss (DE)

(54) Titel: ELECTRIC BICYCLE
(54) Bezeichnung: ELEKTROFAHRRAD

12021/197800 A1

Fig. 1

(57) Abstract: The invention relates to an electric bicycle (10), comprising an electric traction motor (30), which drives the front wheel (18) and/or the rear wheel (20), a traction storage battery (32) for supplying electrical energy to the traction motor (30), an electric-bicycle controller (40) for controlling the traction motor (30), and a walk-assist controller (50) for controlling an adaptive walk-assist function, which is supported by the traction motor (30), in accordance with an interaction force (F_I) between a pushing person (9) and the electric bicycle (10). The electric bicycle (10) has an inclination sensor (61) for determining the angle of inclination (θ) of the electric bicycle (10) relative to the terrestrial horizontal (H), a traction-motor torque decoupler (44) for determining the current traction-motor torque (T_M), an electric-bicycle velocity sensor (60) for determining the current electric-bicycle velocity (v_B).

Already
Invented?

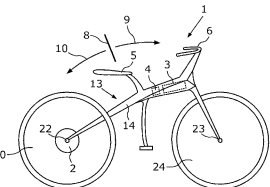
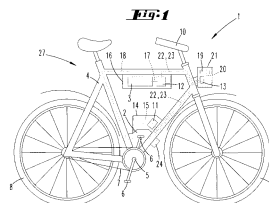
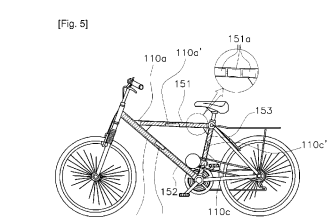
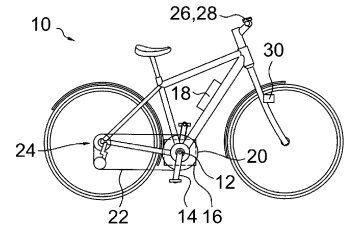


Fig. 1



[Fig. 6]

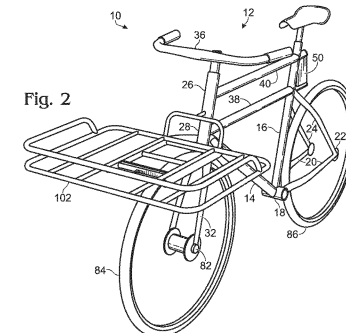


Fig. 2

AI-based patentability search:

1. Cluster patents based on machine-learning and Gen AI
2. Use LLM to find and rank conceptually similar documents

AI for IP Office Service Delivery

■ Promising Domains of AI Application:

- Filing assistants – natural language
- Business intelligence, valuation and analytics
- Integration with multiple data sources to add business value

Artificial Intelligence for IP Offices – Example: Filing Assistant

Traditional Approach:

Forms with complicated requirements and technical language.



Provisional Refusal

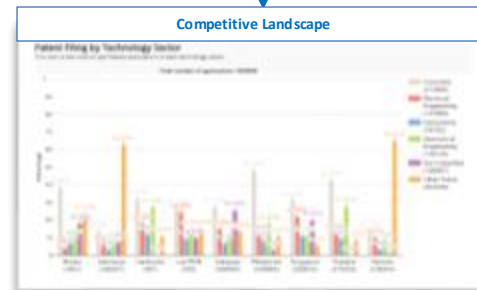
AI-based Approach:

Machine translates user needs into technical language.

Please describe your business:

A chain of exclusive coffee shops with single-origin, locally roasted coffee...

Competitive Landscape



Filing Advice:

*Make the logo more abstract and distinctive.
Limit the goods and services to "...".*

Pre-Approved Application

AI Adoption for IP Offices

■ Considerations

No easily-available solution: WIPO and other partners have some solutions, but no complete answer.

Sharing within region or across regions: Look for partnerships with other offices.

Availability of commercial solutions: Leverage regional cooperation.

■ Possible Actions

Identify requirements and options. Detailed study of potential applications of AI and available solutions.

Technical knowledge sharing. IT experts from IP offices and cooperation partners meet and brainstorm solutions

Future Directions

- Analysis of requirements and business priorities
 - Smart Digital Tools
 - User-oriented Services
 - New Technologies
 - Etc
- Regional and national priorities
- Technical complexity, risk and requirements
- Implementation timeframes
- Available resources and tools from WIPO and other partners
- Implementation strategies

Thank You