Patents end to end IT updates

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Patent artificial intelligence update

Auto classification

• Leverage a machine-learning algorithm to establish classifications on incoming patent applications
  • Currently most new patent applications are classified by a contractor
  • Transition to Cooperative Patent Classification (CPC) as an agency will have a new internal classification called C* which will be the classification for the claimed subject matter
  • Auto classification tool aims to give a full CPC classification as well as C*s to a portion of incoming patent applications

Patent AI search

• Conducting surveys and training for AI-based features on third-party search tools that are already available to the examining corps
• Continuing to explore technologies for additional AI-based capabilities that may be useful to assist examiners with retrieving potential prior art
## Stabilization update

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<tr>
<td>• Continuity of business operations for patents processing</td>
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<th>Remediation approach</th>
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<td>• Migration of infrastructure components for legacy applications to USPTO- and vendor-supported versions in order to minimize outage risk</td>
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<th>Accomplishments</th>
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<td>• Developed rigorous plan to sequence and stabilize nine critical patent systems</td>
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<td>• Reviewed and finalized stabilization assessment and recommendations provided by systems integrator for the nine critical patent systems; one patent application has been stabilized (P-ELP which stores all patent documents)</td>
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<th>Next steps</th>
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<td>• Authorized systems integrator to move forward with stabilization for Private PAIR; other patent systems will be stabilized as part of phased approach</td>
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<td>• Roadmap draft for transitioning systems to the future state architecture, which will provide HA/failover capabilities, cloud adoption simpler unified user experience, as well as an increase in infrastructure resilience for business continuity (flexible enough to address different customer segments)</td>
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Cybersecurity update

Scope

• Protection of intellectual property and patent business operations from a systems and infrastructure perspective

Current state

• Role-based access control for authentication and authorization
• Annual security and risk assessments
• Penetration testing to detect and remediate vulnerabilities
• Data encryption
• Robust security controls, security monitoring, and incident response

Planned enhancements

• Identity Access Management (manage lifecycle of digital identity)
• Zero Trust Architecture (strict identity verification for both users and devices)
Questions and comments

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