

Intellectual Property and
Frontier Technologies

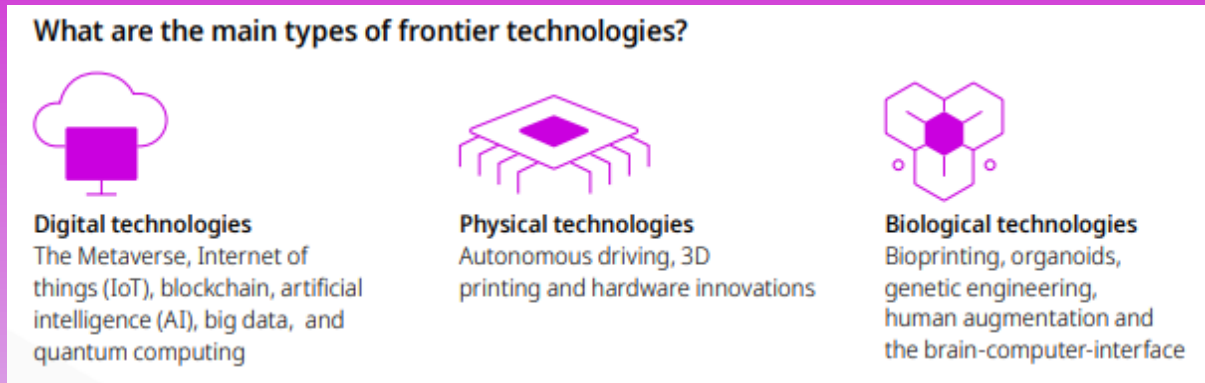
WIPO
WORLD
INTELLECTUAL PROPERTY
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How Frontier Technologies will change the IP System

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Frontier technologies



Frontier technologies are emerging at the intersection of radical scientific breakthrough and real-world implementation: Artificial intelligence. Big data. The Metaverse. Bioprinting. Quantum computing. The Computer-Brain Interface...

These technologies are changing our lives. How we communicate, innovate, create and do business.

They may also hold one of the keys to addressing some of the most pressing global issues we face.

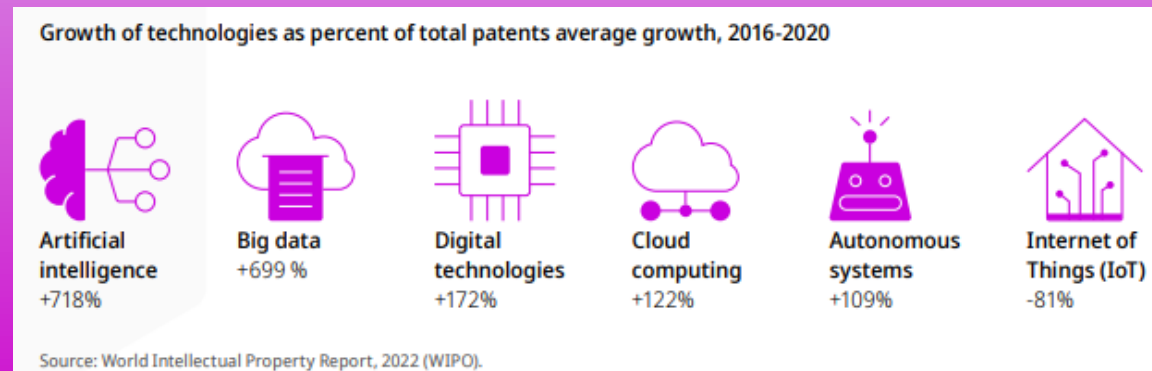
Economic impact

Artificial Intelligence	Internet of Thing (IoT)	Big data	Blockchain
The AI market is expected to grow from USD 16 billion in 2017 to USD 191 billion in 2024.	The IoT market is expected to grow from USD 130 billion in 2018 to USD 1.5 trillion in 2025.	The big data market is expected to grow from USD 32 billion in 2017 to USD 157 billion in 2026.	The blockchain market is expected to grow from USD 708 million in 2017 to USD 61 billion in 2024.
403,596 publications between 1996 and 2018.	66,467 publications between 1996 and 2018.	73,957 publications between 1996 and 2018.	4,821 publications between 1996 and 2018.

Source: Technology and Innovation Report 2021 (UN Conference on Trade and Development).

Frontier technologies now represent a \$350 billion market, which could become a \$3.2 trillion market as soon as 2025.

AI is currently most prolific in terms of patents and patent applications (WIPO Technology Trends Report 2019)



Why does it matter for the IP System?

The importance of intangible assets and IP is growing as digitalization is progressing and frontier technologies are emerging.

Innovation and creation are happening much faster. The number of IP filings is increasing rapidly and subject to more volatility. Markets are globalizing and intangible assets are flowing much more freely across borders.

Three themes

How to make IP accessible, relatable and understandable and really bring IP alive?

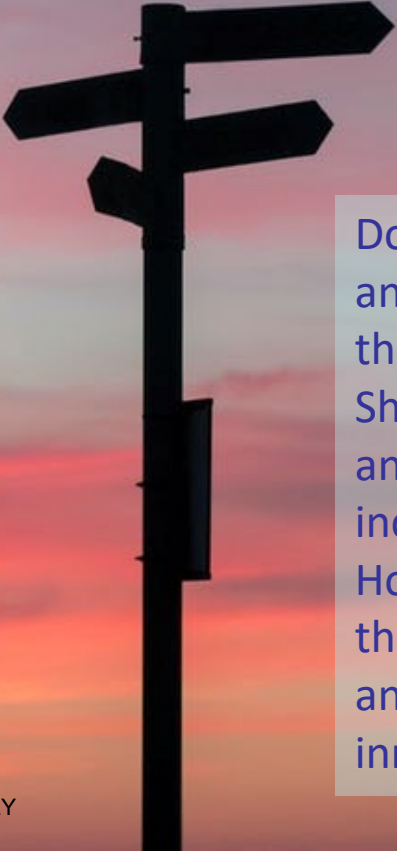
How can frontier technologies make IP and the IP system more efficient and more accessible to all?

How to build IP policy to ensure that IP systems continue to foster innovation and creation?



IP Policy

IP and the current IPR systems were especially designed to foster human creation and innovation.



Does AI innovation and creation fit into the current system? Should AI innovation and creation be incentivized at all? How do we balance the value of human and AI creation and innovation?

AI inventors

AI creators

Does AI need IP incentives to invent and create? What are the consequences for obviousness and originality?

Data: the new oil and legal conundrum

IP can pose both an incentive for the generation of data – for example by way of trade secret protection or database rights - and a hindrance to the access, analysis and use of data – for example when data contains copyright protected works

Frontier technologies are transforming the IP system

Over the next years frontier technologies will be one of the keys to providing more solutions to making IP an everyday asset used by innovators and creators all around the world

IP Office Tools

WIPO and IP Offices around the world are adapting new technologies to better assist innovators and creators.

Great examples include WIPO Speech to Text and WIPO Translate, WIPO Brand Image Search and Patent Classification tools. IP Offices are also starting to develop pre-IP filing assessment tools, for example for trade mark filings, or implementing AI in their process.

- The WIPO AI Tool Index provides a more detailed overview.

Private sector tools

We are seeing many initiatives in the private sector emerging that aim to make IP easier to value and transact.

AI can assist in patent drafting, IP valuation and transacting. Frontier technologies can help detect counterfeits on global marketplaces and find new ways for dispute resolution.

Frontier technologies are right now already being adopted to transform how we register and use IP.



Bringing IP alive

WIPO Conversation Session 6: AI inventions (September 21-22, 2022)

- Open to all
- Free
- Hybrid format
- 2 sessions in 2023 in planning... at least... watch this space!

THANK YOU.

https://www.wipo.int/about-ip/en/frontier_technologies/

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