PATENTS AND THE METAVERSE

BACKGROUND

According to the World Intellectual Property Office [1],

IP will be one of the key drivers fostering innovation in technologies that will build the metaverse and in providing a basis for generating economic activity and growth.

Much of the growth in global metaverse innovation is expected to come as developments in virtual and augmented reality, privacy and security, AI, decentralization, and gamification.

TRENDS

Patent filings for the metaverse started almost a decade ago but have increased fourfold since 2019 [2].

Key players include Microsoft, Meta (formerly Facebook), and Apple.

Generally, metaverse patent applications are for hardware (e.g., VR and AR headsets) and/or software (e.g., synchronization) inventions.

PITFALLS

Patents protect inventions that are new, involve an inventive step, capable of industrial application, and not excluded from patentability.

It is essential that an invention provides a technical contribution, which often involves careful consideration for software innovations to ensure that the invention avoids the exclusions from patentability.

EXAMPLES

Example metaverse patents & patent applications relate to (see also overleaf):

» preserving privacy in virtual reality,
» group control,
» providing a metaverse-based 4D immersive service.

[1] The WIPO Conversation on Intellectual Property and Frontier Technologies
[2] A Quick Look at Patenting Activity in the Metaverse

EXAMPLE CONTRIBUTIONS OF METAVERSE INVENTIONS

» Offering a privacy interface within a VR world allows users to selectively activate a privacy plan while they are already in a VR world, rather than configuring settings in advance. Learn more **here**.

» Every movement that a leader initiates for their individual avatar is substantially mimicked by a follower avatar of a user connected to the group (but no user input to control the follower is required). Learn more **here**.

» The adjustment of image content (for example, in a VR headset) to reduce motion sickness during an experience. Learn more **here**.

» Providing a metaverse-based 4D immersive service, including sound and vibration tailored to an athletic event, to improve a user's sense of presence in a virtual environment. Learn more **here**.

» Methods of improving the accuracy for modelling a user's hands and the accurate rendering of effects their hands have on objects in a virtual environment. Learn more **here**.