

3D CYCLING SIMULATOR

Entrepreneurs and Digital Tech II

John is mad about cycling when he is not working at a company developing 3D/virtual reality films. He has an idea to create a 3D simulator for cyclists on training bikes, with all the added information from the bicycle and fitness wearables of the cyclist. He develops some backgrounds and works on the algorithm for the software to simulate the bicycle movement and vibration. He then creates some indoor and outdoor races, using real cyclists' names and bicycles and advertisers to simulate being in the middle of the race. Cyclists can share their stats, and now the next version is massive multiplayer online real-time participation, where static cyclists go on a tour together, or race each other. He is thinking of pitching the idea to cycle manufacturers and usual advertisers in the cycling space, to sponsor his simulations.

Photo by Paolo Candelo on Unsplash





QUESTIONS

Q1: **What form of protection did or should the creator choose and why?**

John can protect the 3D simulator through patents and the software as a copyright.

Firstly, the 3D simulator may be protectable through **patents** because this may be considered an “invention”, either as a product or a method: basically, a new technical solution to a technical problem.

Secondly, the software inside the 3D simulator may be able to be protected under **copyright** because it can be considered a type of work under the copyright regulation. The source code of the device is considered as a work of authorship under international and national legislation, so it is protected by copyright.

Q2: **How does this IP protection work?**

Copyright protection for the software is used to protect against copying, modifying and distributing or “communicating” the software code behind the simulator. The protection arises automatically when the software is fixed in a tangible medium (i.e. written on a computer) – there is no filing or registration required, though evidence of creation is useful and countries do have voluntary copyright registries. Copyright protects original works such as the software code of the app and gives the creator of the work certain exclusive economic rights relating to the code: to reproduce it, to modify or transform it, and to distribute or communicate it. The author also has the moral right to be recognised as its creator. The duration of copyright is – generally



speaking – the life of the author plus 70 years, but this depends on the case and the law of the country in question.

Secondly, the 3D simulator may be patented as an “invention” if it fulfils the following three conditions: i) novelty, ii) inventive step and iii) industrial applicability. However, it may have the obstacle of being considered “software as such” and may be excluded from patentability. A patent would give John the right to prevent others from making, using or selling his invention in the country for which the patent has been granted, for a limited period of time (up to 20 years from application). In order to obtain patent protection, the creator must file a patent application in a patent office (European or national) of the territory where he wants protection. Once granted, patent law gives the inventor an exclusive right to exclude others from making, using, selling, and importing the protected invention or products resulting from the invention for a limited period of years (20 years, from application) in the country for which protection has been granted, in exchange for publishing how the invention works (an “enabling public disclosure” of the invention).

Q3: How do you think the IPR law would help the creator to innovate and protect against abuse (false/unfair competition)?

IPR law helps creators to innovate by recognising and rewarding them for their commercially-successful inventions and creations, prohibiting third parties from copying or using their creation without authorisation. IPR law therefore protects creators against abuse by providing specific legal actions against “copiers” and competitors who violate their IP rights. By giving exclusive rights to those who invest and create something new, they can license the invention

or work for economic return, sharing it with society, and forcing competitors to innovate by looking for new solutions over something already on the market. Furthermore, when a new technology enters the market, society benefits and it enables further technological research and development.