

A Model to Reserve Rights of Creations Using a Blockchain Environment

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Abstract

With the advancement of technology, the music industry has become highly technological. This is the reason for the many advantages and disadvantages of the music industry. Copyright infringement is a serious issue that has emerged with technological advancement. Traditional copyright protection platforms' weaknesses are copyright protection drawbacks, and the inability of other parties (without the copyright owner) involved in the creation to get their revenue directly. Therefore, this research introduced a new model with a customizable revenue distribution facility using the Ethereum blockchain and smart contracts for copyright protection. 100 music files were used to determine the success of the model by changing factors such as pitch and speed. In addition to that, the frequency of copyright identification and uploading speed are also obtained. Existing platforms and the research model were compared using descriptive analysis. In this suggested solution, music files are protected through the block encryption method, and the system makes use of smart contracts to control the entire life cycle of digital copyright. The accuracy of the revenue model was checked by calculating the Ethereum gas price and revenue amount. When compared with traditional copyright protection systems, this model has a higher success rate than traditional platforms, and it is a very successful model for copyright owners to protect their creative rights and as a revenue-sharing platform.

Keywords: *Ethereum Blockchain, Copyright Protection, Smart contract, Music Copyright, Blockchain for Music*

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