

Abstract:

This Shariah compliant block production on proof-of-stake blockchains invention presents a groundbreaking Shariah-compliant block production method applicable to a wide range of Proof-of-Stake (PoS) blockchains. It addresses the critical need to integrate ethical and religious principles, particularly Islamic financial law, into the burgeoning field of blockchain technology. By redefining the validation process in blockchain networks, this innovation ensures that transactional operations adhere to Shariah standards, broadening accessibility and appeal.

Central to the invention is a sophisticated mechanism that involves modifying both the execution and consensus clients within a PoS blockchain. This modification enables the system to effectively identify and exclude non-Shariah-compliant transactions based on predefined criteria. The criteria focus on excluding transactions associated with activities like lending and borrowing, gambling, and prediction markets. The system employs an 'allow-list' approach to include only permissible transactions, such as non-algorithmic and non-derivative ERC20 token transfers, native PoS blockchain token transfers, and Decentralized Exchange (DEX) transactions.

This invention is pivotal in fostering inclusivity and ethical practices in the blockchain space. It opens the blockchain ecosystem to a wider audience, especially catering to the global Muslim population and investors seeking ethically aligned investment opportunities. The Shariah-compliant block production method set forth by this invention has the potential to revolutionize block production across various PoS blockchains, establishing a new standard for ethical and inclusive financial technology.