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Land Registration using Blockchain

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Abstract: *In order to modernize land registration, we are proposing to create a blockchain-based land registration systemic to make records far more secure, transparent, and trustworthy. It is well documented that many land registration systems suffer from issues if fraud, transparency, and record keeping have long suffered from inefficiencies. Since blockchain is a decentralized and immutable technology, we can be assured that each transaction will not be altered or tampered with after being recorded. Each transaction authority is based on trust in some central authority to make each transaction while our smart contract can help eliminate trust issues. It eliminates fraud of ownership via an immutable record and consensus based verification, eliminates unauthorized modifications by ensuring the registrar is the only party who can transact on the platform, and minimize human error via smart contracts which verify ownership, transfer of property rights, and payment settlement. The system also allows parties-permissioned real-time access to land records as needed, including government authorities, buyers and sellers of the land, and legal parties, all while establishing trust and transparency in land records and land transactions to reduce dispute resolution. With a decentralized ledger based system, records will be replicated and therefore resilient of being lost or corrupted in one specific location, or one replicator location. The outcome of this project shows that the potential to apply blockchain technology to modernize land registration and therefore make land transactions secure, transparent and efficient where transactions benefit all parties to the transaction, also stakeholders involved in land development and transaction record including government record keeping functions.*

Keywords: land registration

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