Kleros

The Blockchain Dispute Resolution Layer

Kleros is a blockchain Dispute Resolution Layer that provides fast, secure and affordable arbitration for virtually everything.

What problem does Kleros solve?

The rise of disputes of the global, digital and decentralized economy in areas that cannot be solved by state courts and existing alternative dispute resolution methods. For example, in international e-commerce and service delivery.

What is Kleros solution?

Kleros uses blockchain and crowdsourced specialists to adjudicate disputes in a fast, secure and affordable way. Kleros connects users who need to solve disputes with jurors who have the right skills to solve them. Crowdsourcing taps into a global pool of jurors. Blockchain technology guarantees evidence integrity, transparency in jury selection and incentives for honest rulings.

How does it work?

Alice hires Bob for a freelancing work and they both select Kleros as arbitration provider. Instead of paying Bob directly, Alice sends the payment to a smart contract. A dispute arises. Evidence is sent to Kleros, which draws a jury of experts. Jurors analyze the evidence and vote Alice as winner. The smart contract reimburses Alice. Jurors collect arbitration fees for their work, which are paid by Bob. The case is closed.

What are some Kleros use cases?

Kleros is a multipurpose arbitration system able to handle a large number of disputes:

● Alice claims that the good she bought from Bob in an e-commerce platform is defective. The jury votes for Alice and she is reimbursed.
● Alice raises money with a crowdfunding campaign. The jury votes that she failed to meet critical milestones. Investors are reimbursed.
● Alice flags Bob for an inappropriate comment in a decentralized social media platform. The jury decides that Bob violated the terms and conditions. He loses reputation points and the content is removed.
● Alice flags Bob's song for plagiarism on a decentralized music platform. The jury determines that the song was plagiarized. Revenue from the song is redirected to Alice.
● Alice claims that Bob Telephone company wrongly billed her for a service. The jury rules for Alice. She is reimbursed.
● Alice flags Bob for cheating in an online gaming tournament. The jury analyzes the recording of the game and vote that Bob is guilty. Bob is banned from the platform.

How are jurors selected and rewarded?

Users self-select into subcourts using an ERC 20 token called pinakion (PNK). Jurors are drawn randomly from all those who self-selected. Juror incentives come from 2 sources: arbitration fees and token redistribution. All jurors drawn to rule a case collect arbitration fees (which are paid by the customer in ETH). After the decision is made, jurors who voted incoherently with the rest are penalized by the loss of the PNK used as deposit. Jurors who voted coherently with the rest are rewarded with the PNK lost by jurors who voted incoherently. The incentive scheme is based on the Schelling Point principle. The token incentivizes users to vote honestly. Jurors who try to game the system will lose money.

Why do you need a token?

1) To prevent the sybil attack, 2) To generate incentives for jurors to vote honestly.
PNK cannot be replaced by Ether as this would greatly increase the risk of a 51% attack on Kleros.

What is your timeline?

A prototype on kovan has already been released. We plan to release a Minimum Viable Product on the main net by Q2 2018. To conduct a token distribution event by Q2 2018.

Who is the Team?

- Dr. Federico Ast. *CEO*
- Clément Lesaege. *CTO*
- Nicolas Wagner. *WEB3 Developer*
- Sam Vitello. *Dapp Developer*
- Romina Kavcic. *Design Lead*
- Maria T. Vidal. *Communication Lead*
- William George. *Crypto-economic Researcher*
- Enrique Piqueras. *Front-end Developer*

How can I learn more about Kleros?

Website
White paper

Kleros, a Decentralized Court System for the Internet (Abridged)

Github
Medium
Slack
Twitter
Community Telegram Group

Versión en Español: Kleros, un Protocolo de Justicia para Internet