Incendia

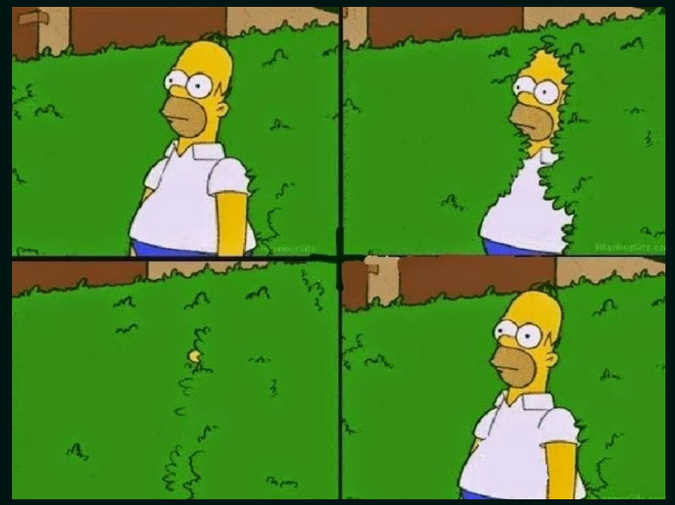
Anonymous On-Chain Auctions with ZK Passport registration

ETHGlobal Buenos Aires

Overview

Private Auction

- Private bids
- Private Identity
- On chain settlement (no third party)



Registration

ZK Passport registration

- keeping users identity private
- Inforce +18 age for bidding
- Prevent double bidding => address is bind to the identity

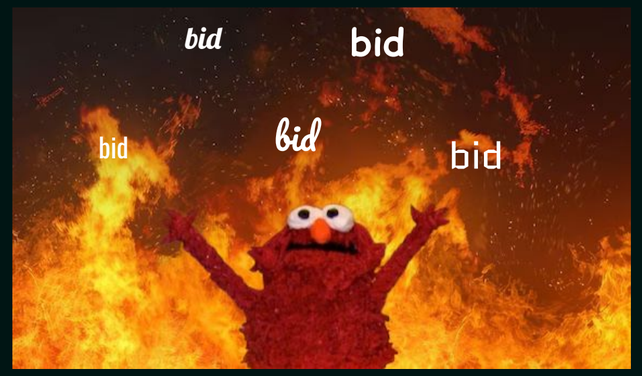
How?

Proof of Burn 🔥

- Generate a unspendable address

  Burn Address = hash(Ceremony data, Bid , zk passport ID . . .)

- Burn negligible amount Eth to that Address 🔥
- Generate and submit the burn proof
- Wait for the end of submission deadline …
- on chain settlement



Demo

future work

- Noir smart contracts
- Deploy on Aztec chain
  (encrypted bids)
- Add multiple auction scenarios
- Optimise the proof for smartphones

TEAM

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Thank you :)