RING TUMBLER0.1

An idea I quickly wrote up for a Ring Signature Tumbler Replacement service:

- 0. Assume at first a website with similar functionality to mymonero, but users are allowed to optionally choose "advanced" accounts which have bitcoin wallets and the option to place limit buys / limit sells.
- 1. Advanced user Ui for i=0,1,2,... places limit buy Xi monero for Yi bitcoin and / or limit sell Wi monero for Zi bitcoin each having a fixed minimum time to cancel Ti
- 1' possibly an option to automatically set your limits at current poloniex rate + F3%
- 2. Bitcoin user desires to send B bitcoin to an address with mix n>=3
- 3. set the site fee at F1% (e.g. .01) and the monero n-mix transaction fee at F2% (e.g. n*.01)
- 4. site calculates (1-F1%) * Xi / Yi * (1 - F2%/100%) Zj / Wj = M(i,j) for all (i not equals j)

explanation: computing the exchange rate to go from bitcoin -> monero -> monero blockchain mix-> monero -> bitcoin

- 5. Site finds M(i,j) such that the ratio Xi /M(i,j) is minimum out of all i,j such that both (Zj > B and Yi * (1-F2%/100%) > Wj) and (Ti - Now) > time for 60 seconds + 1 bitcoin conf + 1 monero conf + epsilon

explanation: this is finding the best price available with enough currency to finance the transaction, with enough time left to finance the transaction.

- 6. Site produces a qr code for Ui's address (at the website) to accept bitcoin and a quote for B' = B / M(i,j) bitcoin it will require to send, and then if bitcoin is received at the address Ui, the transaction is carried out.

benefits:

- adds lots of transactions to monero blockchain with higher mix-ins
- convenience for bitcoin users over tumblers
- advanced users and site owner make money

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