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(72) Inventor; and

(71) Applicant: GUTIERREZ-SHERIS, Luis Eduardo
[US/US]: 27 Chestnut Street, #2b, Ridgewood, New Jersey
07450 (US).

(74) Agent: FESSENDEN, Giovanna H. et al.; Hamilton,
Brook, Smith & Reynolds, P.C., 55 Old Bedford Rd., Suite
200, Lincoln, Massachusetts 01773 (US).

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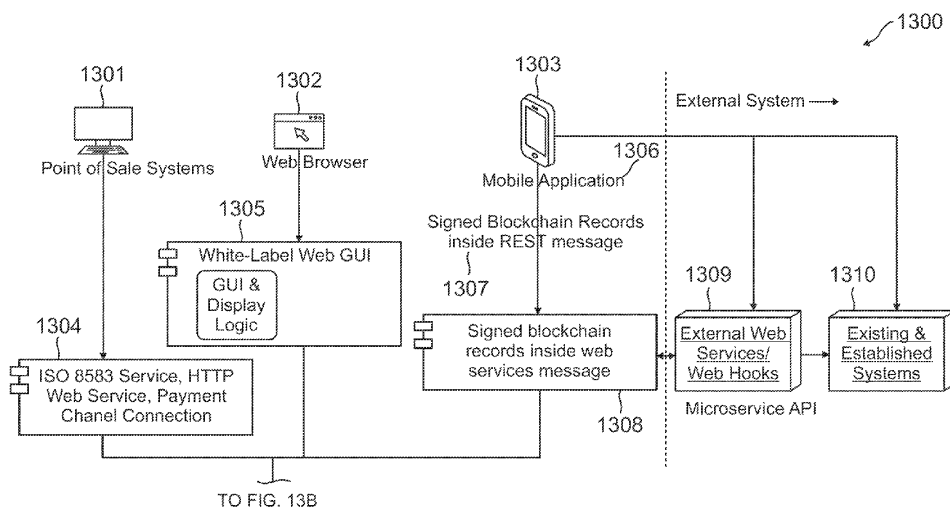


FIG. 13A

(57) **Abstract:** Blockchain synchronization and point-of-sale integration systems are provided in a packet-switched computer network. The POS interfaces through the network with a consumer smartphone and a blockchain validation device. The POS shares a session identifier with the blockchain validation device by transmitting a graphic encoding of a payment request and the session identifier to the smartphone. The camera of the smartphone is configured with an image of the graphical encoding. A payment instruction is encoded to conform to the payment request including the session identifier and is transmitted to the blockchain validation device. The blockchain validation device performs a verification of the correctness and authenticity of the payment instruction encoded in the data record. The POS device receives a confirmation that the correctness and authenticity of the payment instruction encoded in the data record to confirm it has been verified.

CA, CH, CL, CN, CO, CR, CU, CV, CZ, DE, DJ, DK, DM,
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