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| (51) International classification : H04L0009320000, H04L0009060000, G06F0021640000, G06F0016230000, G06F0021620000 | (71)**Name of Applicant :**<br> **1)Chitkara University**<br>   Address of Applicant :Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India. Patiala ----------- -----------<br>**Name of Applicant : NA**<br>**Address of Applicant : NA** |
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(57) Abstract :

A system 100 for data certification based on block chain can include a cloud server 200 with a plurality of blocks in a shared ledger 304 and at least one node 104 in a network 120 to upload and download data for certification. The server 200 including one or more modules, at least one database 222, and one or more processor 202 to perform operations to acquire a first block hash equivalent to a first data value registered on the shared ledger 304 and a second block hash registered on the shared ledger 304 from a different private ledger; define a relative order of the registration of the first and second data values on the shared ledger based on the first and second block hashes; deliver indication about the relative ordering of the first and second data values registered from the private ledgers; and validate the permissioned block chain ledger and update off-chain storage 310 to hash them for transparency and to complete certification.

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