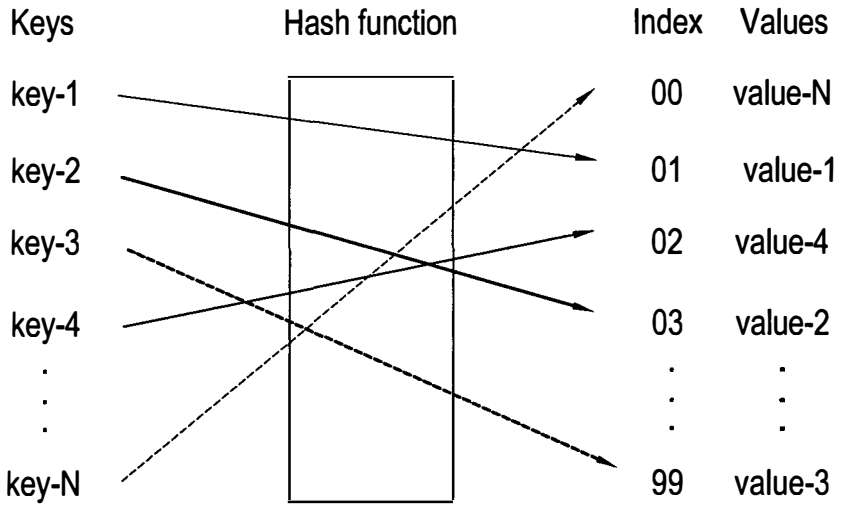
Keys
Hash function
Index
Values
key-1
key-2
key-3
key-4
key-N
00
01
02
03
99
value-N
value-1
value-4
value-2
value-3

Fig. 1

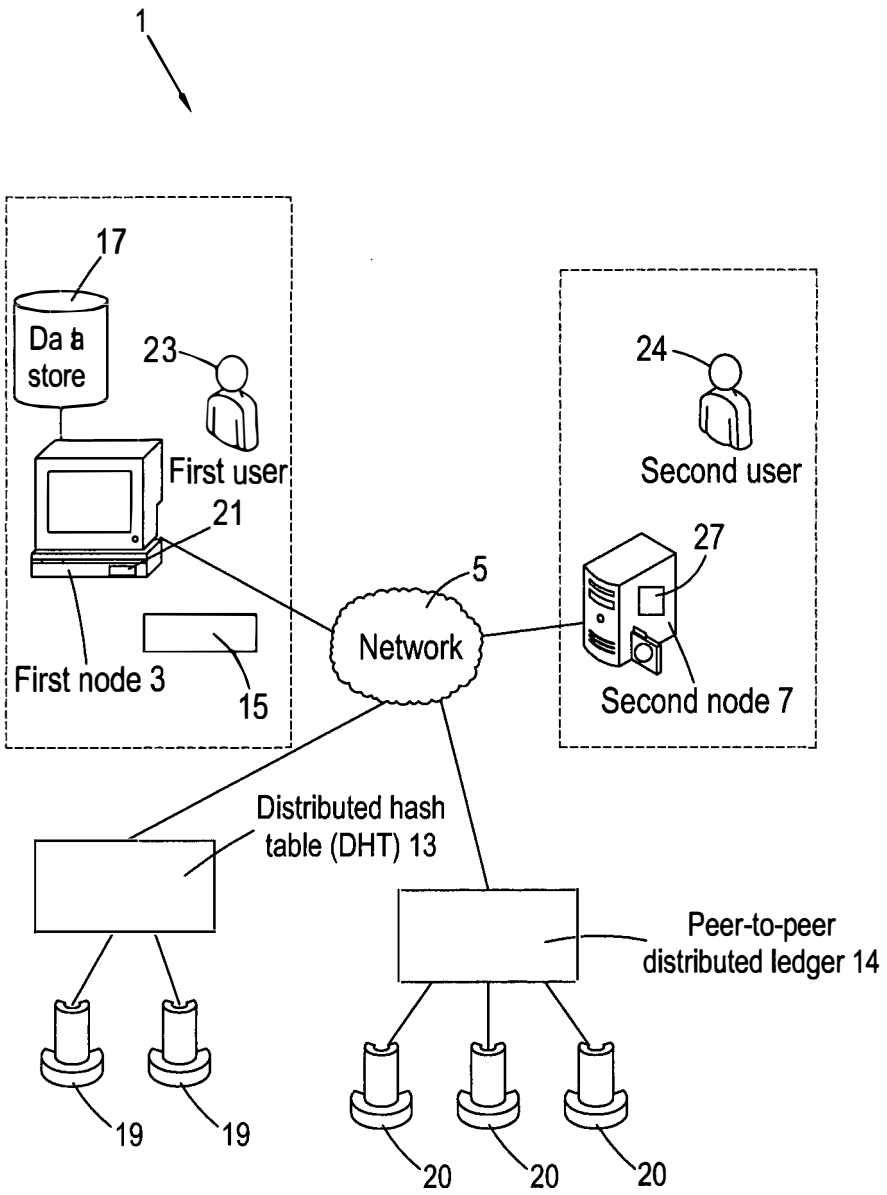
1
17
Da a
store
23
First user
21
First node 3
15
5
Network
24
Second user
27
Second node 7
Distributed hash
table (DHT) 13
Peer-to-peer
distributed ledger 14
19
19
20
20
20

Fig. 2

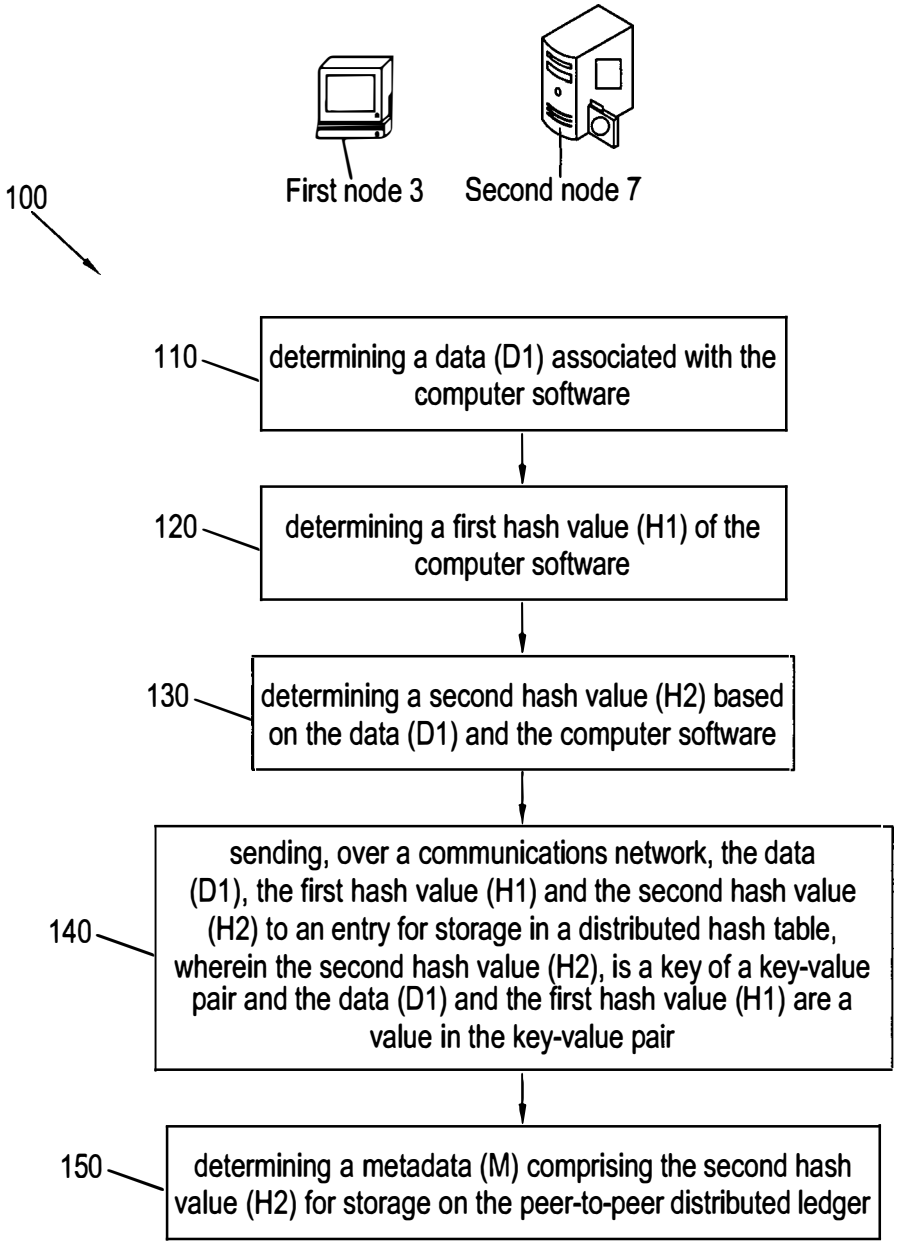
First node 3
Second node 7
100
110
determining a data (D1) associated with the computer software
120
determining a first hash value (H1) of the computer software
130
determining a second hash value (H2) based on the data (D1) and the computer software
140
sending, over a communications network, the data (D1), the first hash value (H1) and the second hash value (H2) to an entry for storage in a distributed hash table, wherein the second hash value (H2), is a key of a key-value pair and the data (D1) and the first hash value (H1) are a value in the key-value pair
150
determining a metadata (M) comprising the second hash value (H2) for storage on the peer-to-peer distributed ledger

Fig. 3

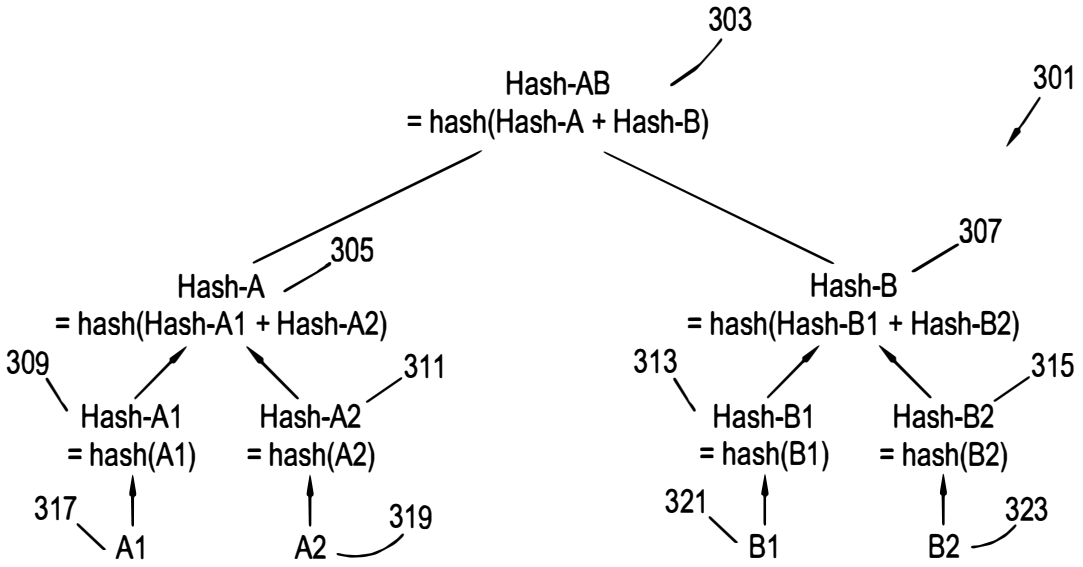
303
Hash-AB
= hash(Hash-A + Hash-B)
301
305
Hash-A
= hash(Hash-A1 + Hash-A2)
307
Hash-B
= hash(Hash-B1 + Hash-B2)
309
311
313
315
Hash-A1
= hash(A1)
Hash-A2
= hash(A2)
Hash-B1
= hash(B1)
Hash-B2
= hash(B2)
317
319
321
323
A1
A2
B1
B2

Fig. 4

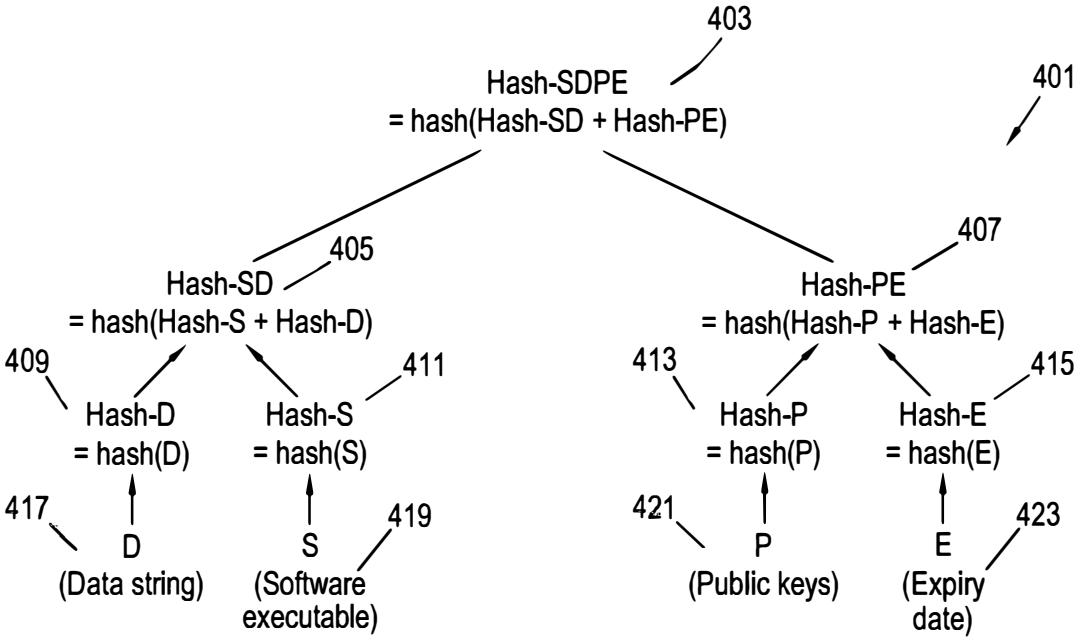
403
Hash-SDPE
= hash(Hash-SD + Hash-PE)
401
405
Hash-SD
= hash(Hash-S + Hash-D)
407
Hash-PE
= hash(Hash-P + Hash-E)
409
411
413
415
Hash-D
= hash(D)
Hash-S
= hash(S)
Hash-P
= hash(P)
Hash-E
= hash(E)
417
419
421
423
D
(Data string)
S
(Software executable)
P
(Public keys)
E
(Expiry date)

Fig. 5

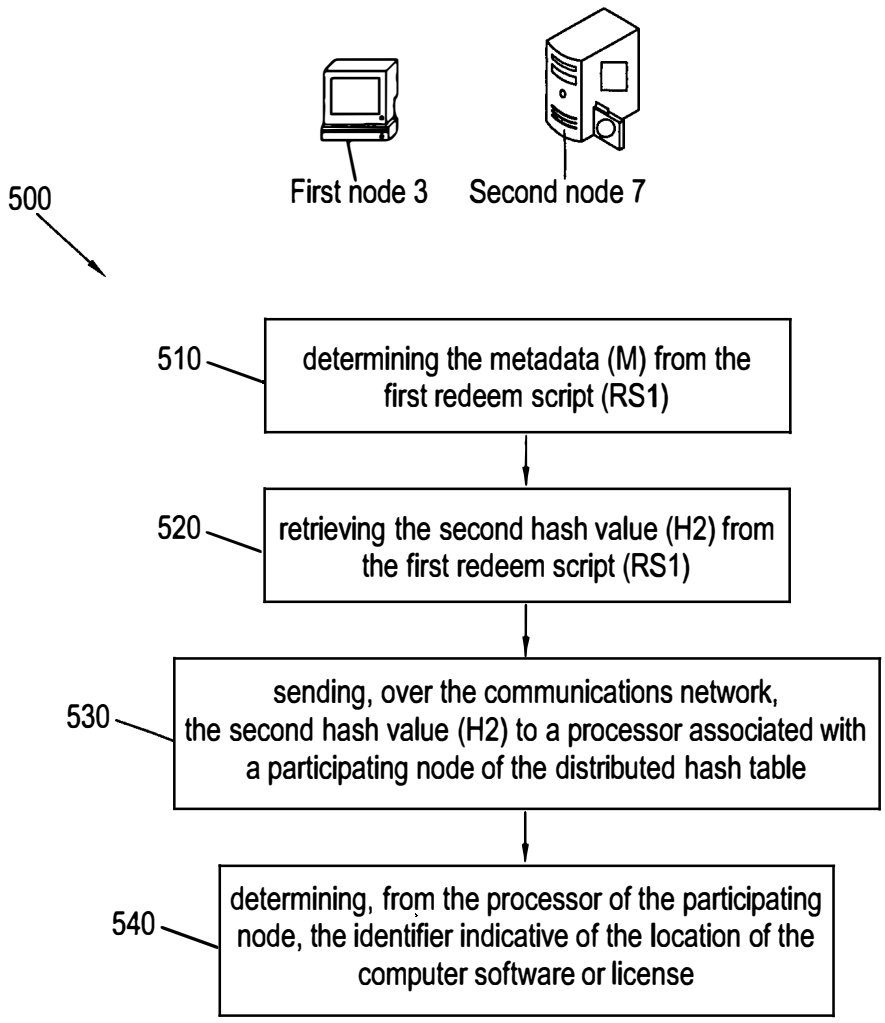
First node 3
Second node 7
500
510
determining the metadata (M) from the first redeem script (RS1)
520
retrieving the second hash value (H2) from the first redeem script (RS1)
530
sending, over the communications network, the second hash value (H2) to a processor associated with a participating node of the distributed hash table
540
determining, from the processor of the participating node, the identifier indicative of the location of the computer software or license

Fig. 6

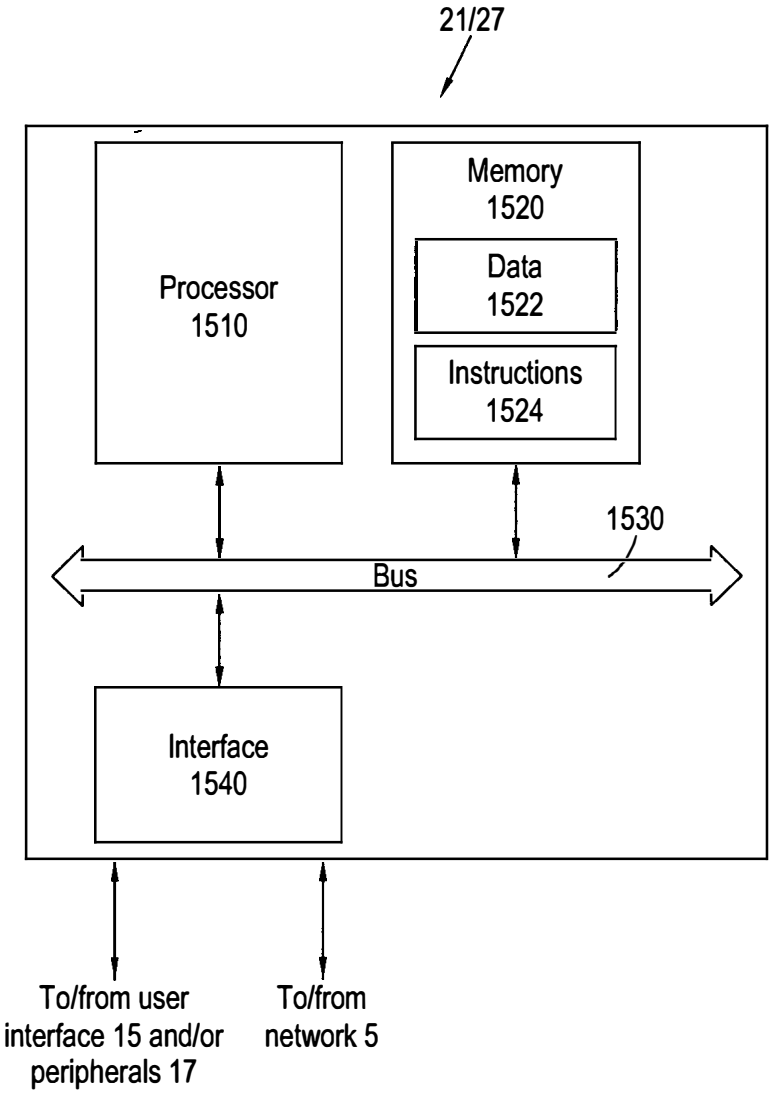
21/27
Processor
1510
Memory
1520
Data
1522
Instructions
1524
1530
Bus
Interface
1540
To/from user
interface 15 and/or
peripherals 17
To/from
network 5

Fig. 7