

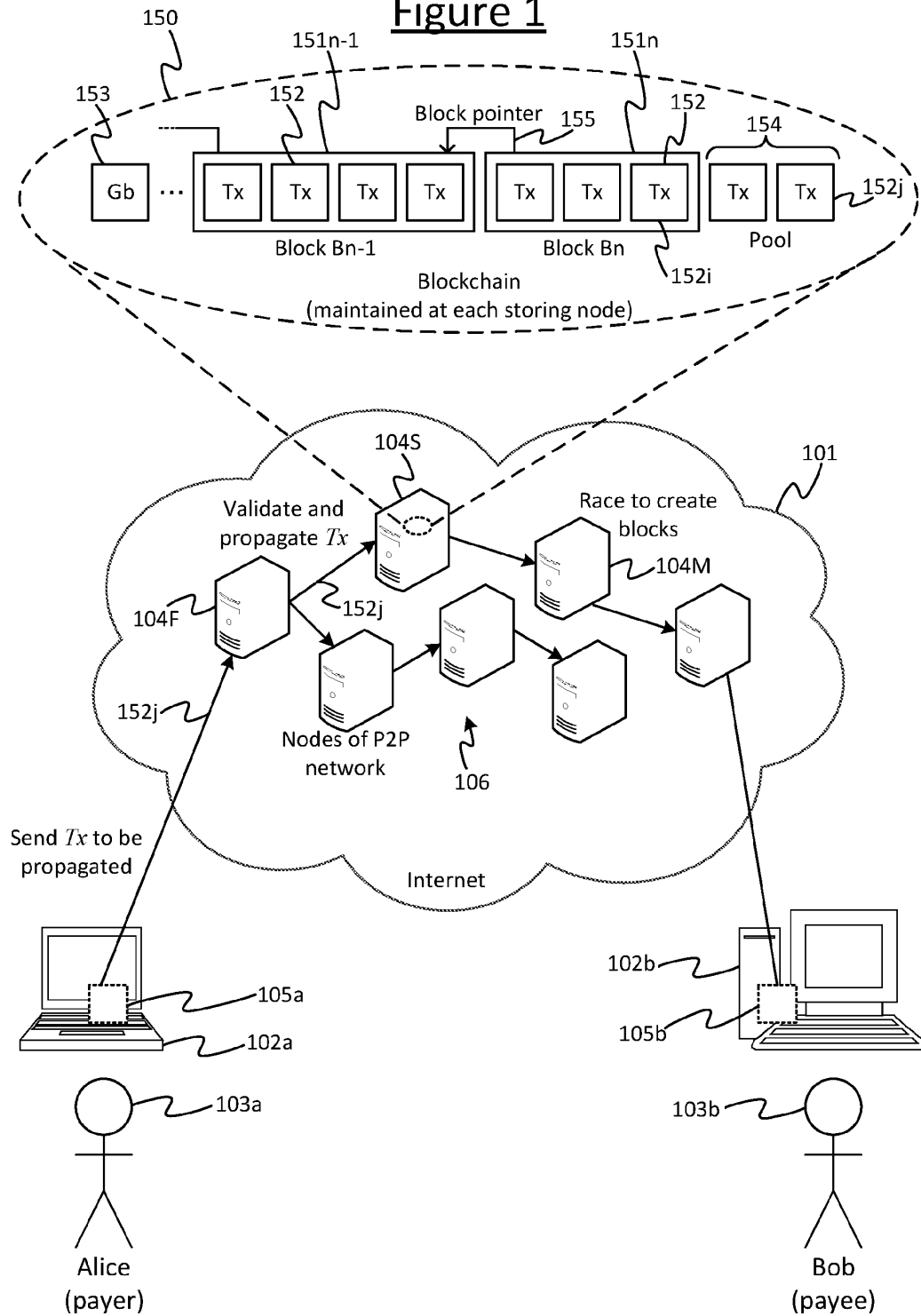
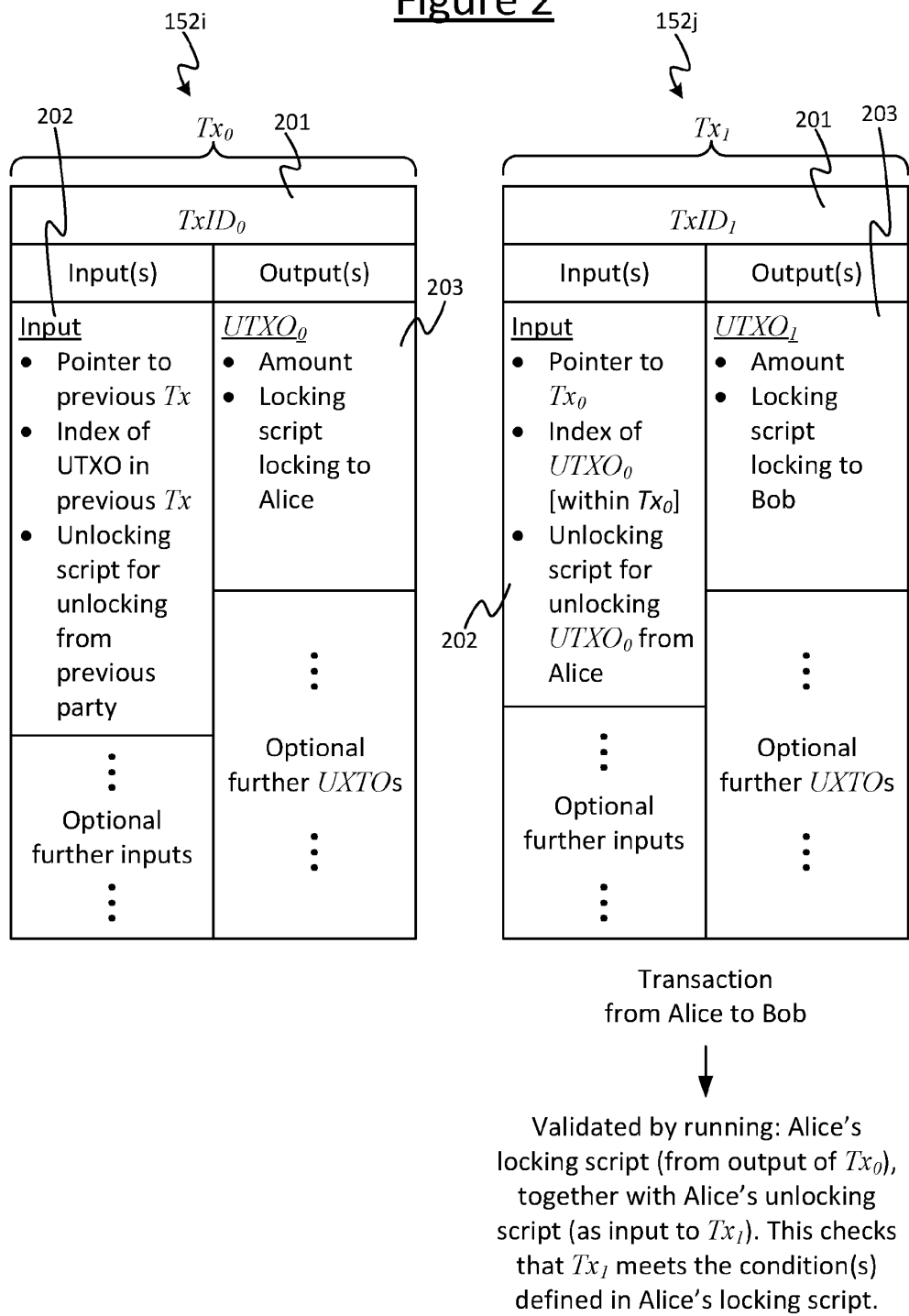
Figure 1

Figure 2



Transaction from Alice to Bob

↓

Validated by running: Alice's locking script (from output of Tx_0), together with Alice's unlocking script (as input to Tx_1). This checks that Tx_1 meets the condition(s) defined in Alice's locking script.

non-leaf
nodes

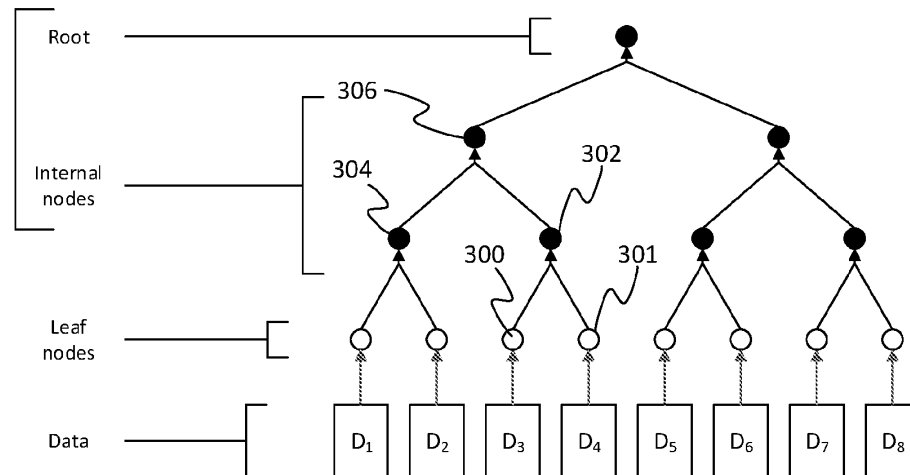


Figure 3

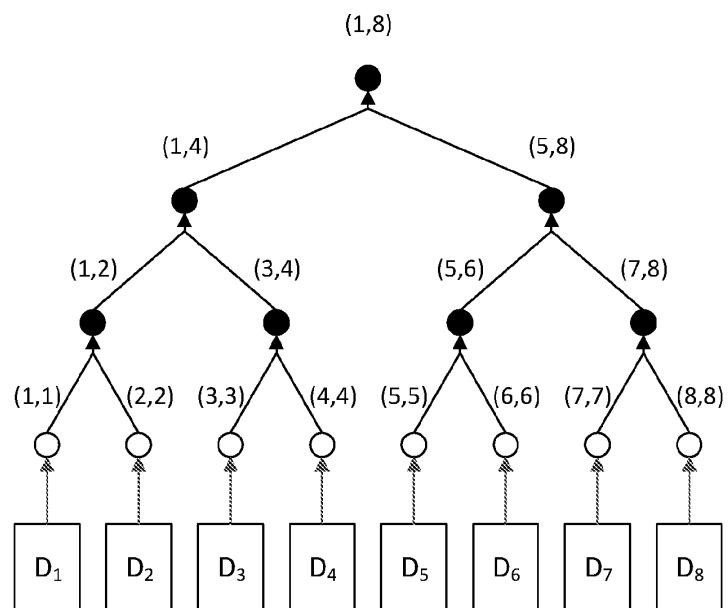


Figure 4

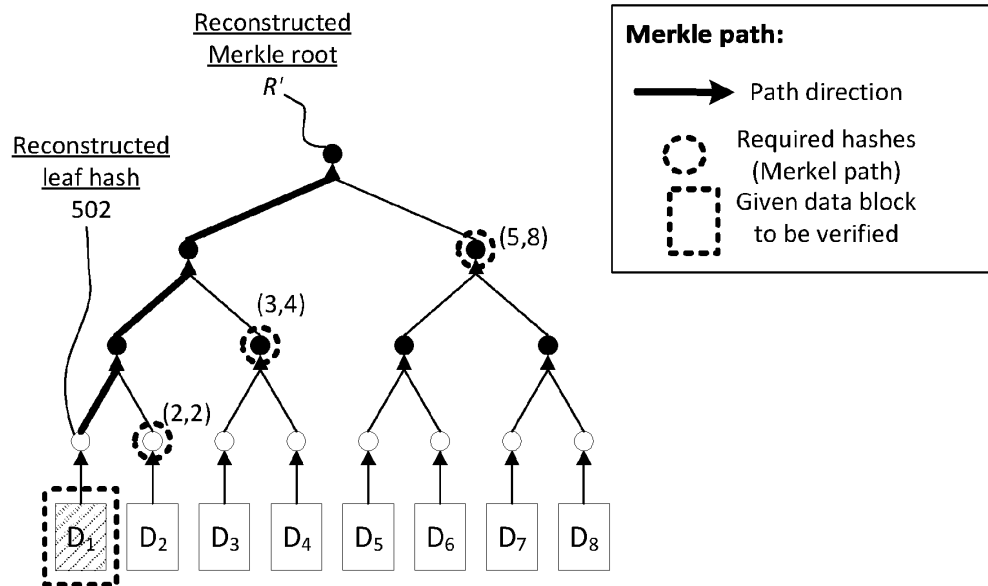
Figure 5



Figure 6

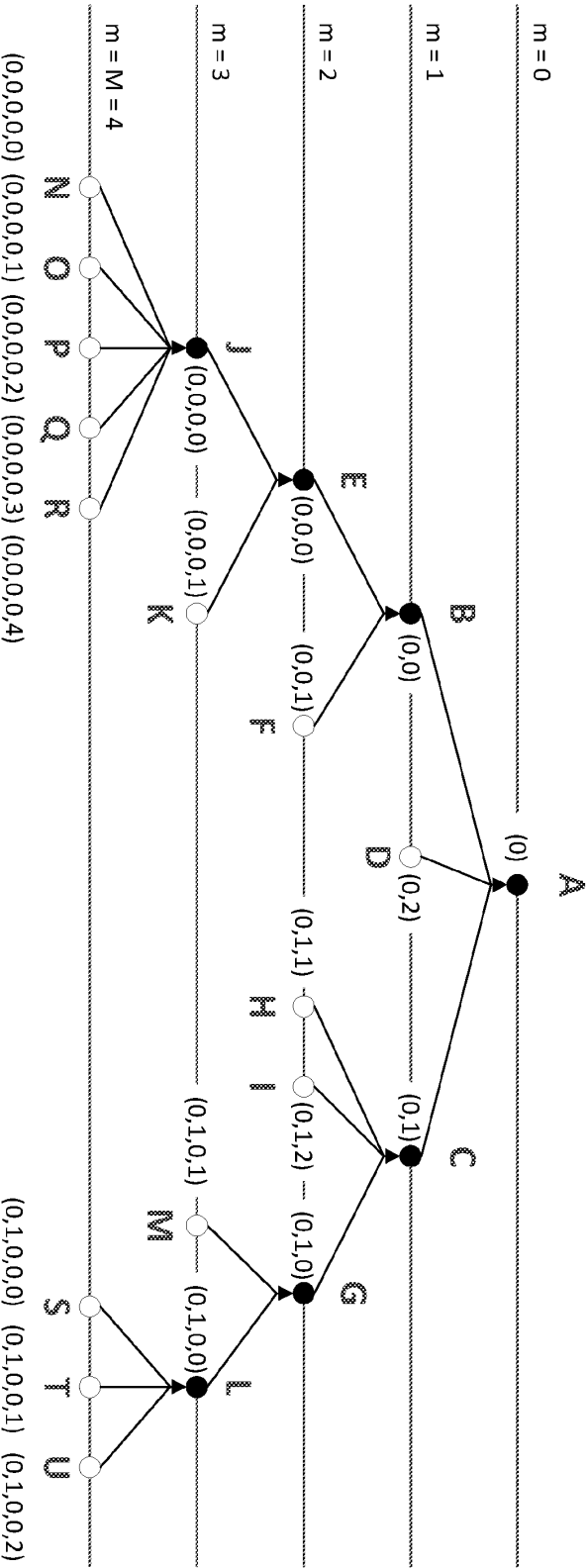


Figure 7

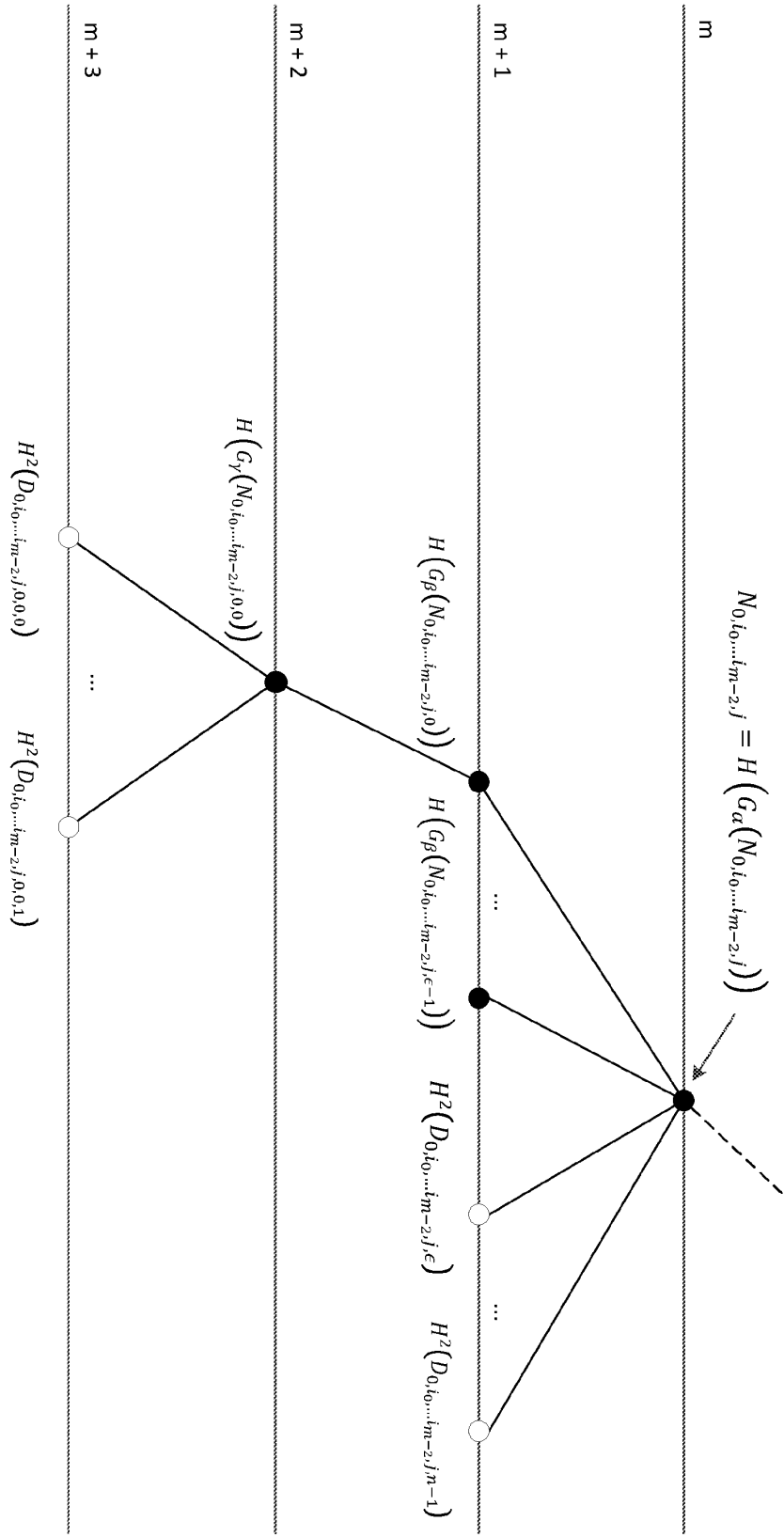


Figure 8

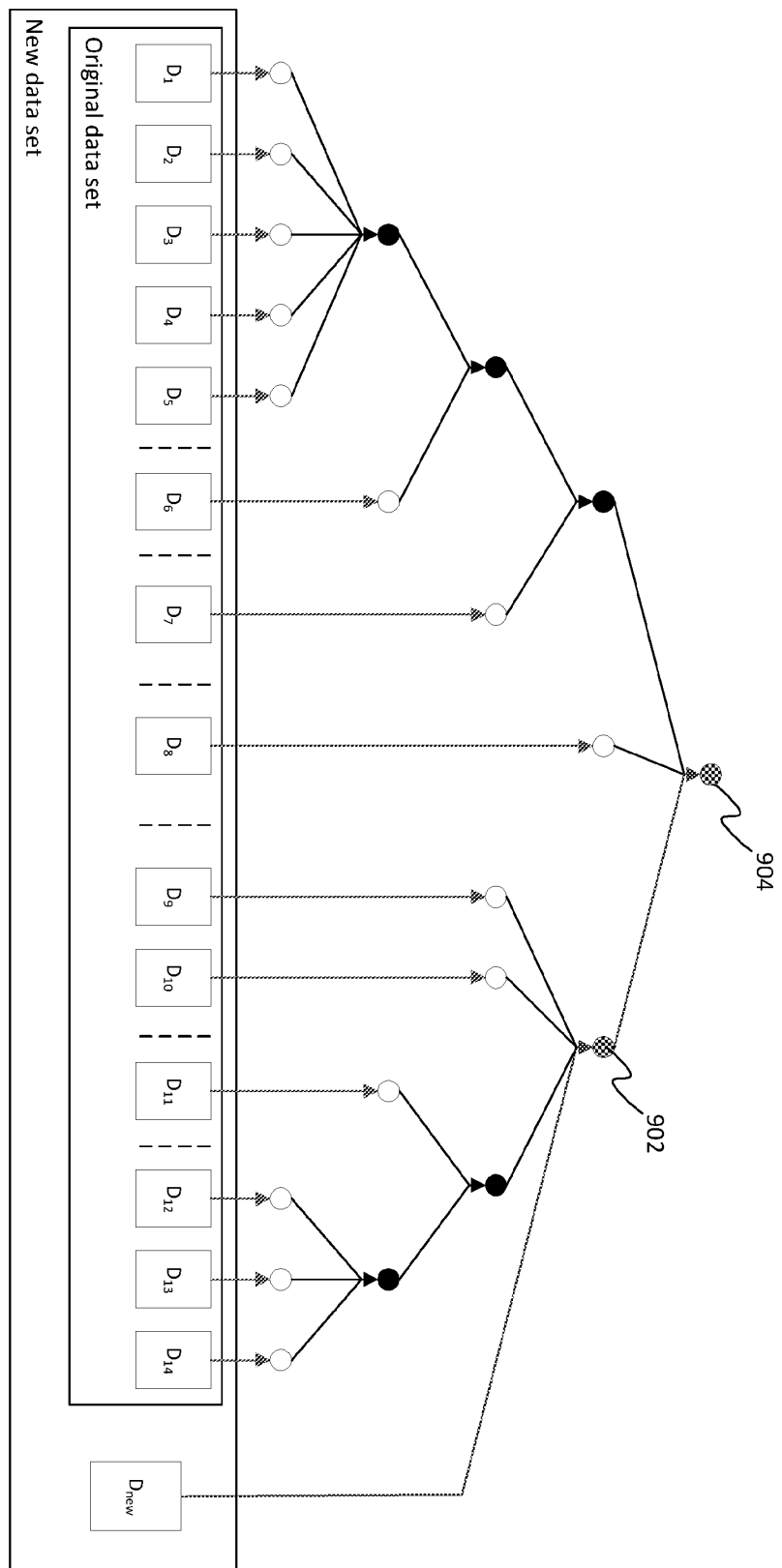


Figure 9

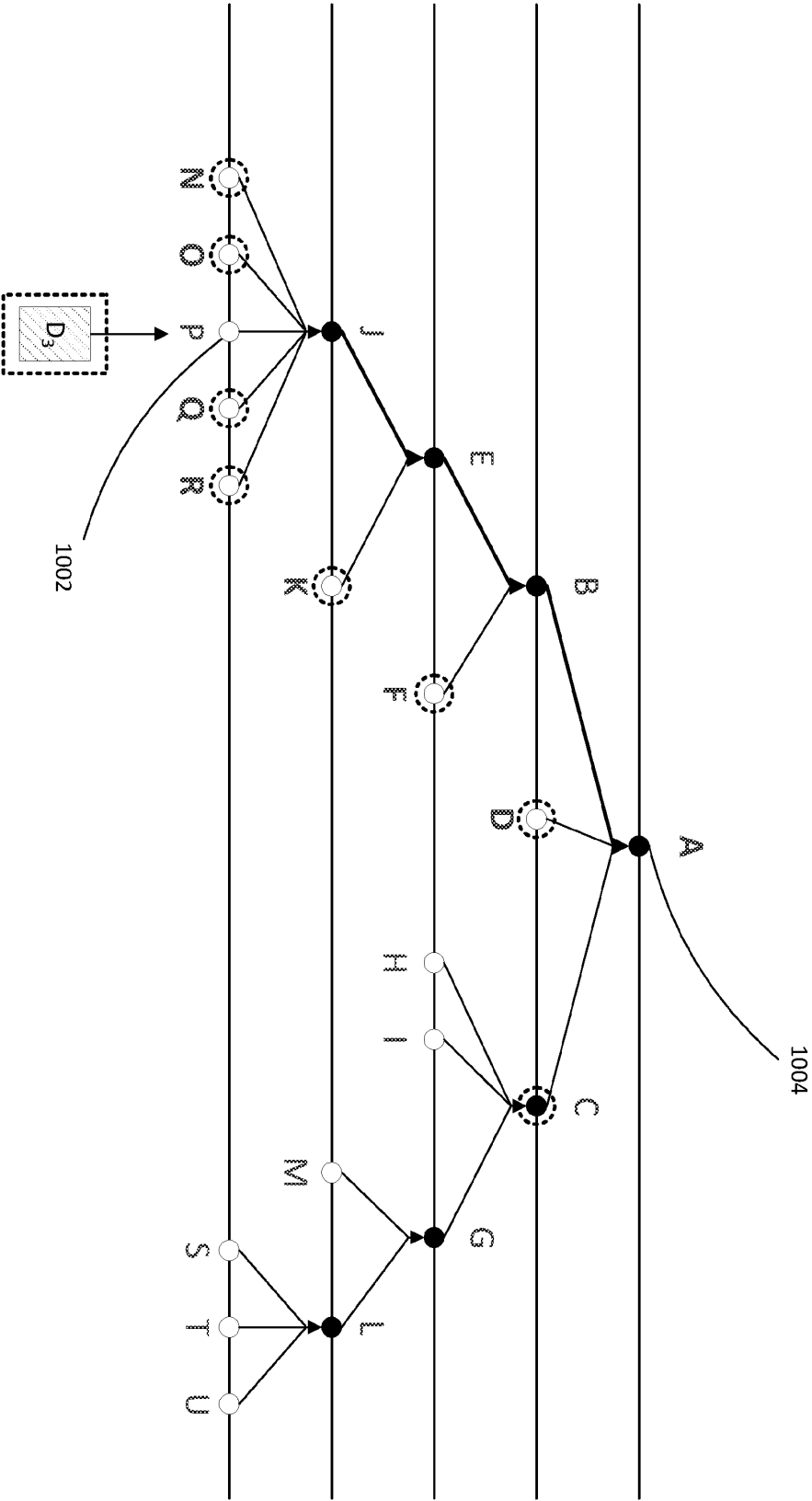


Figure 10

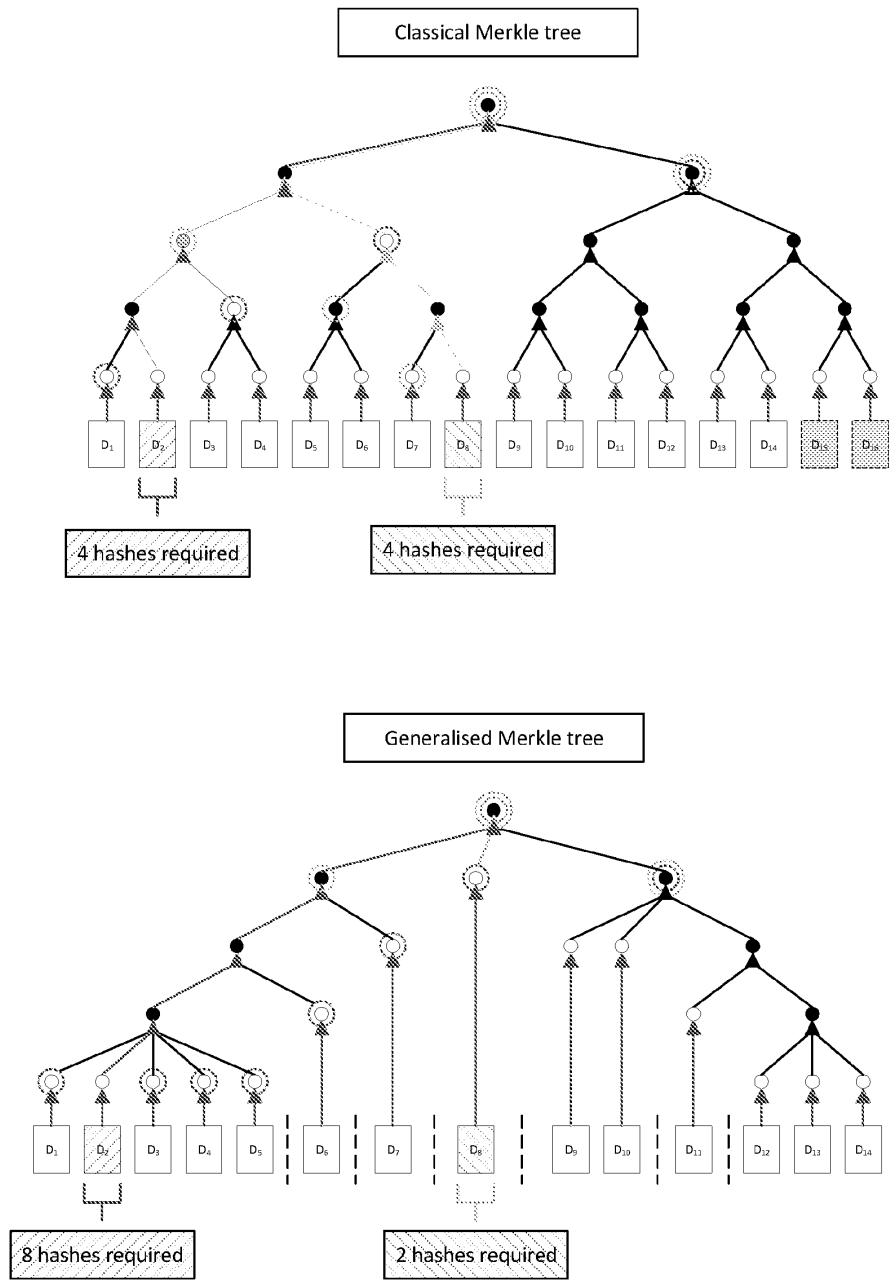


Figure 11

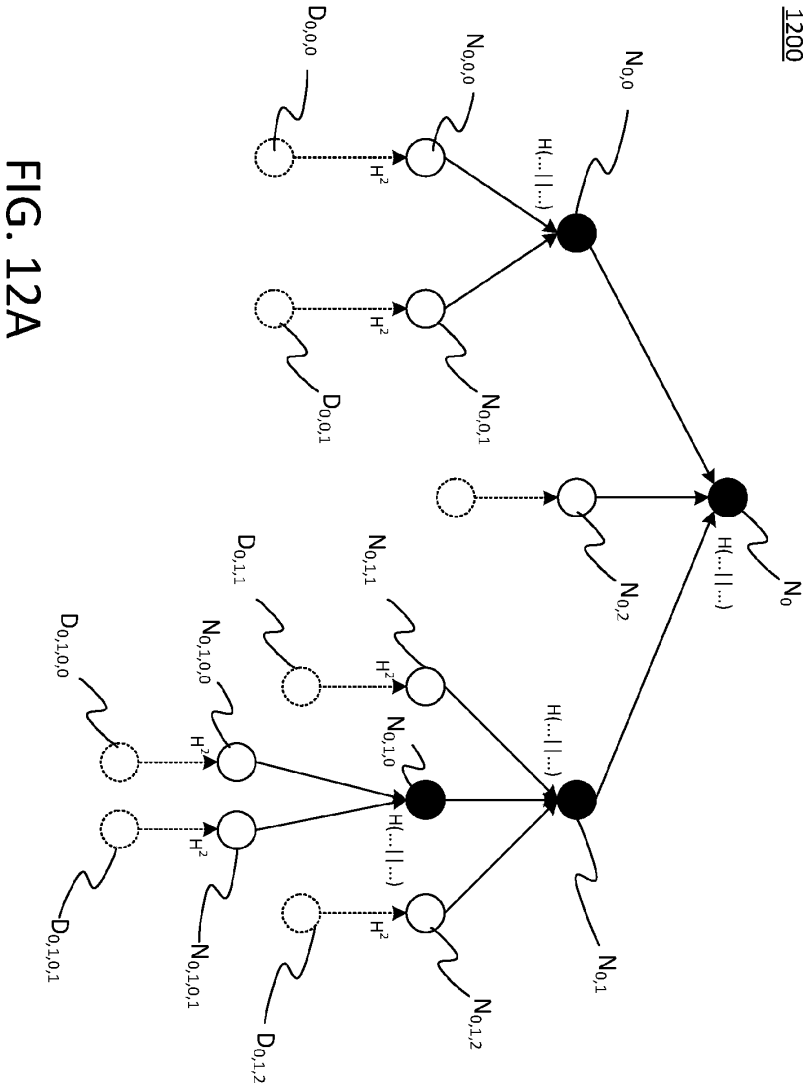


FIG. 12B

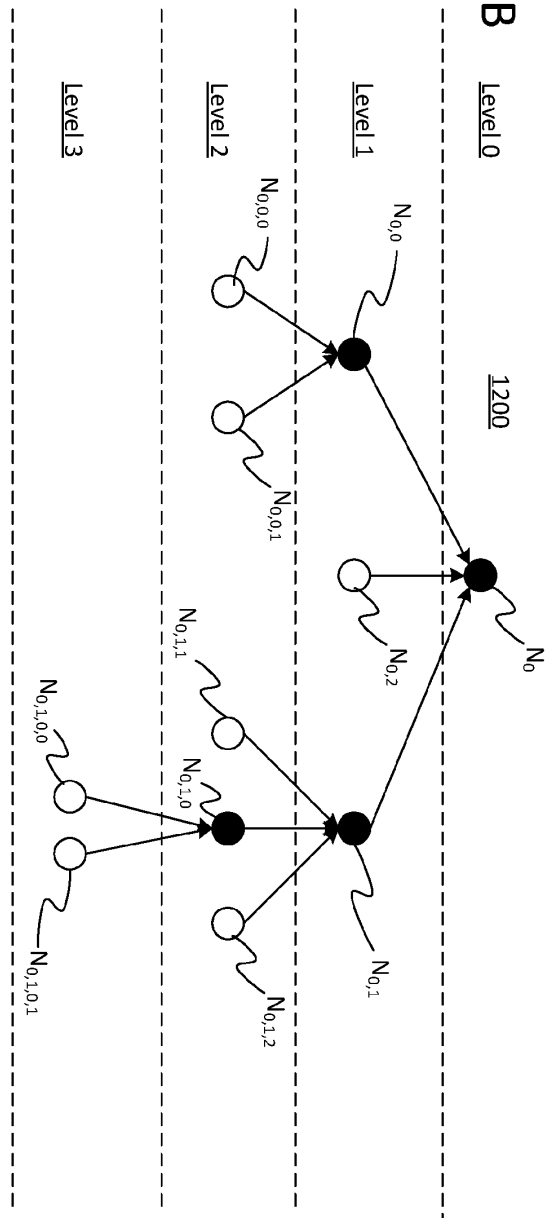
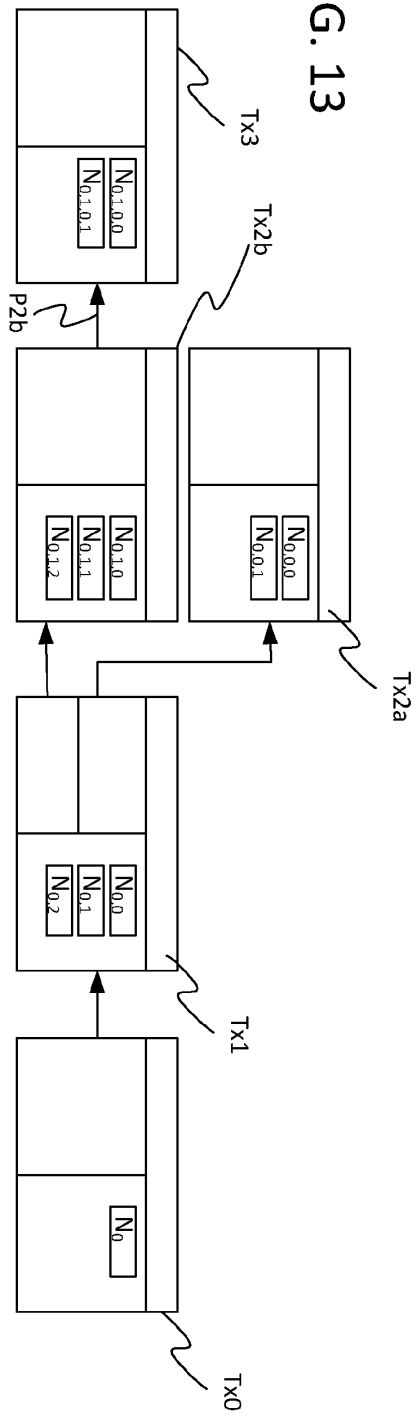
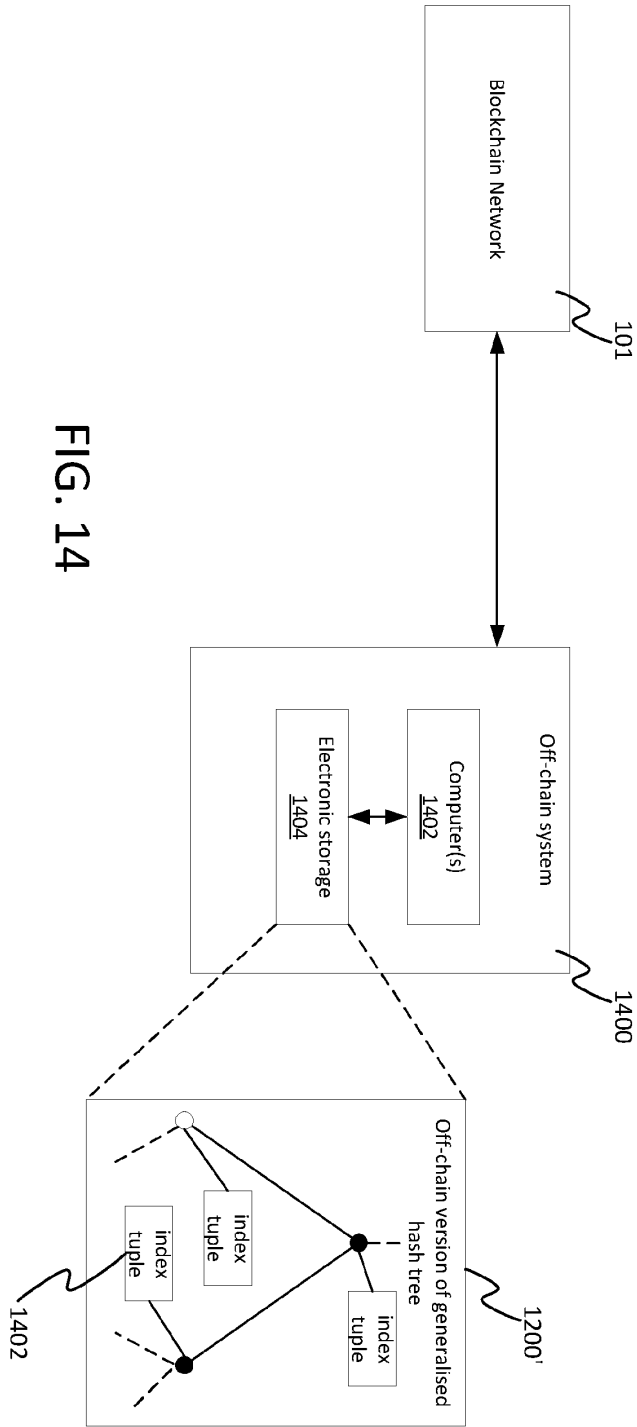


FIG. 13





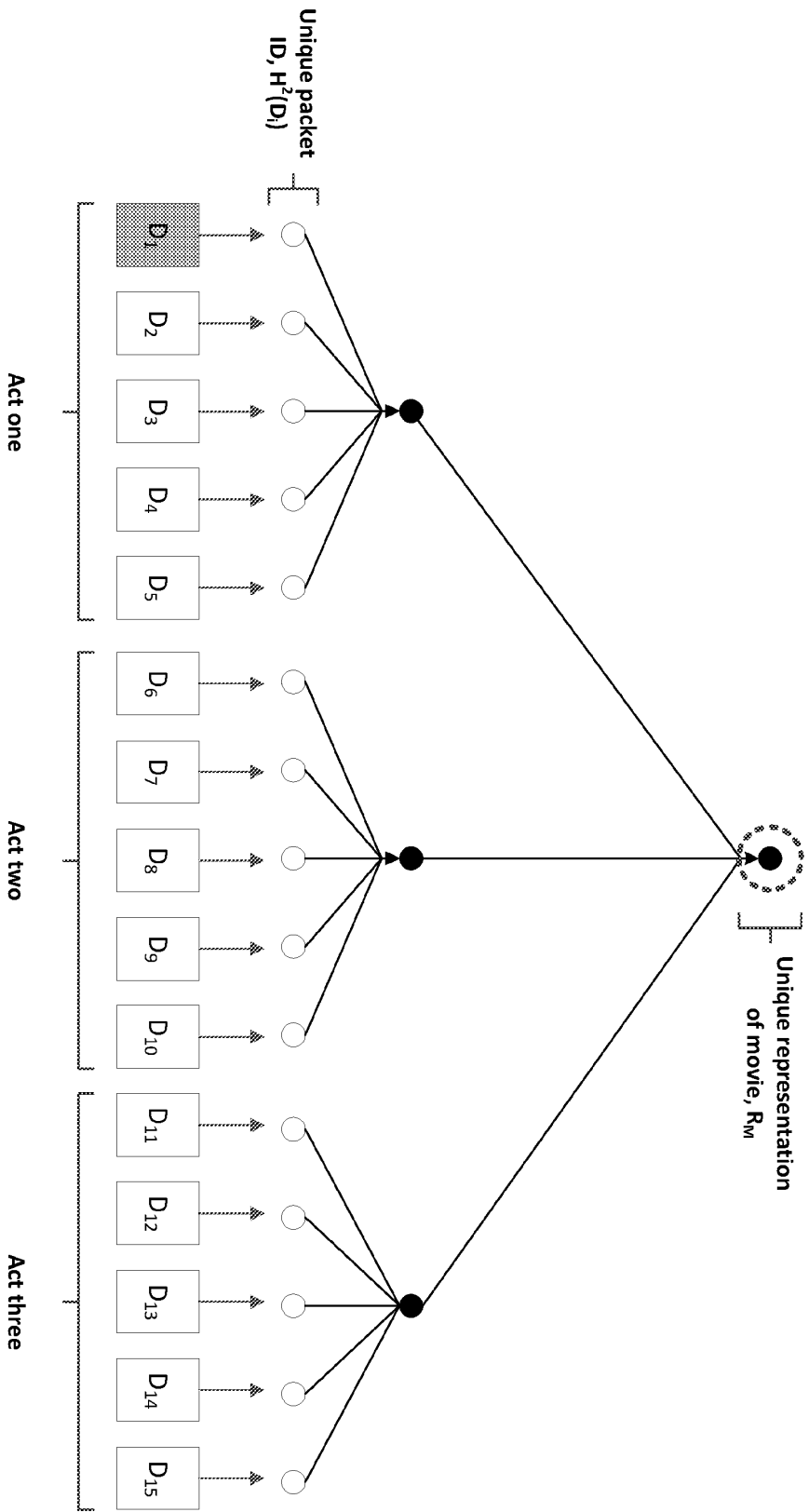


FIG. 15

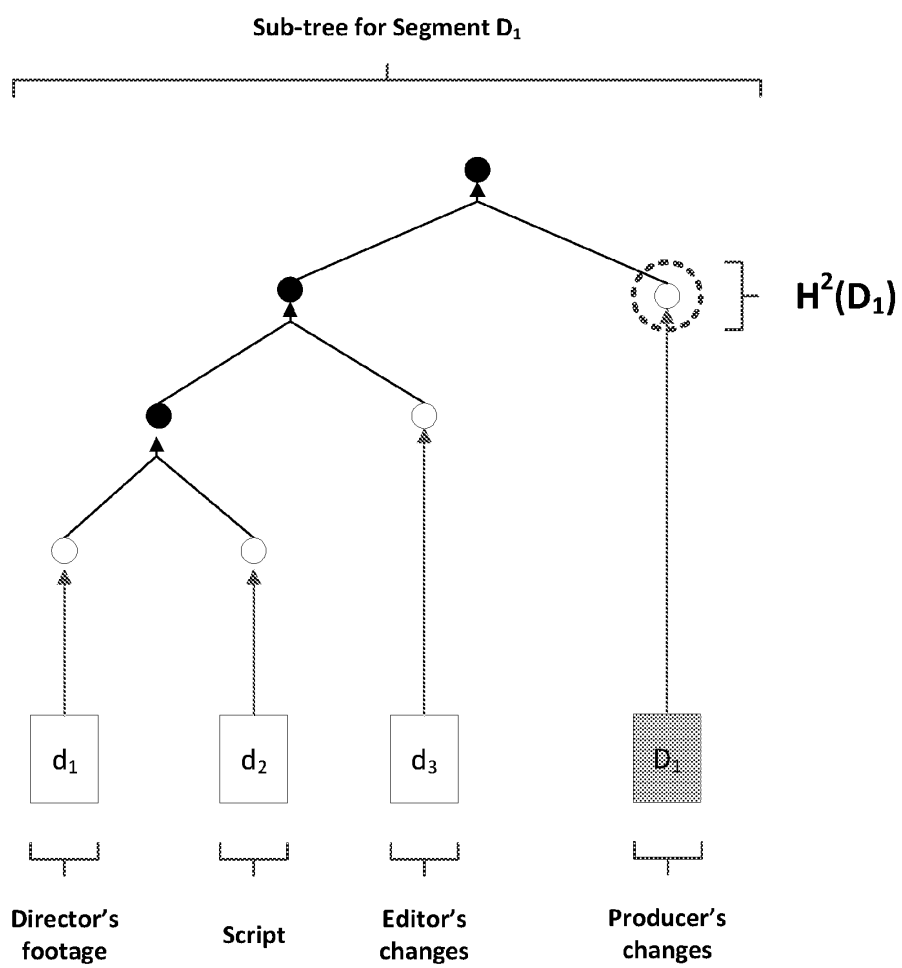
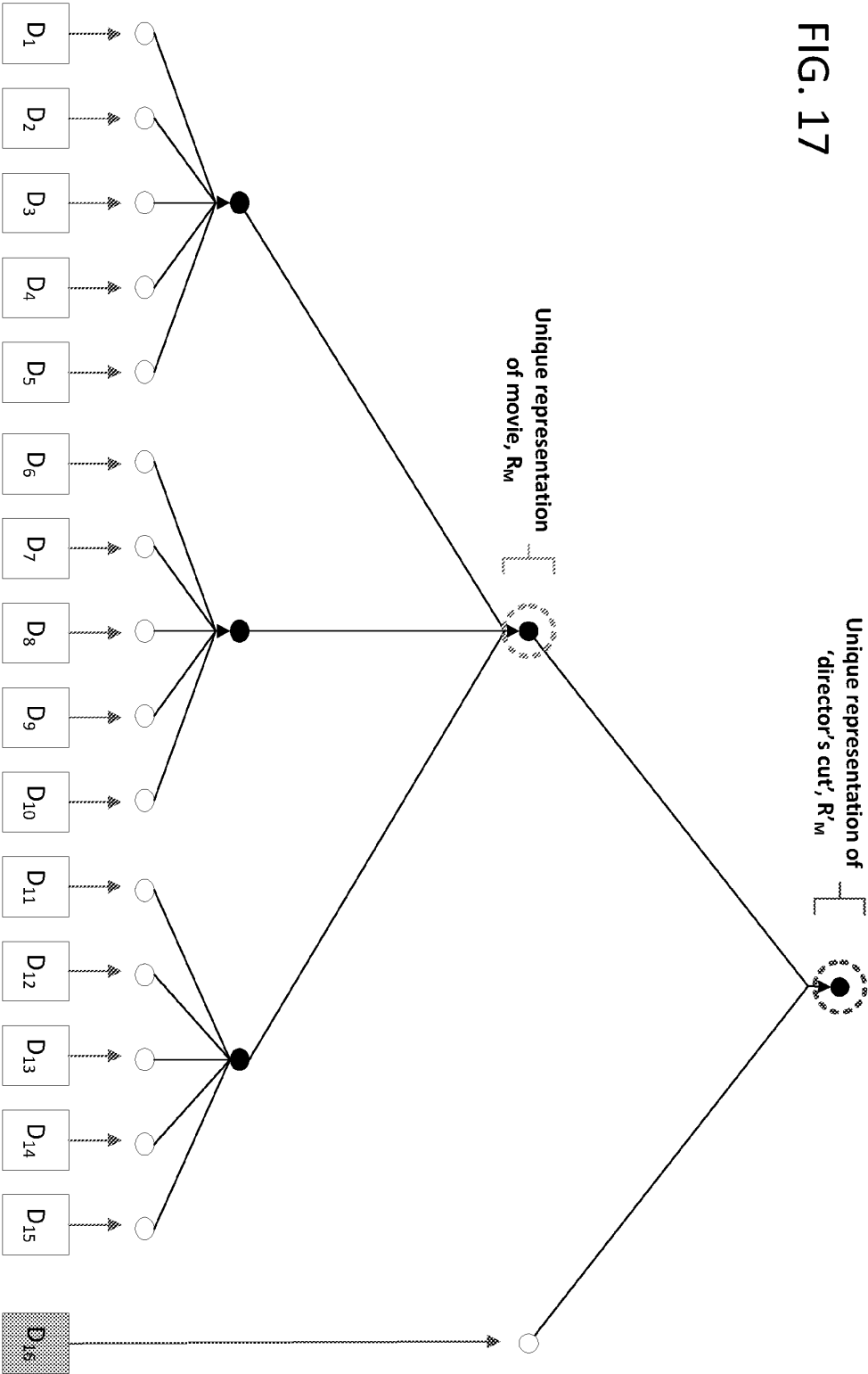
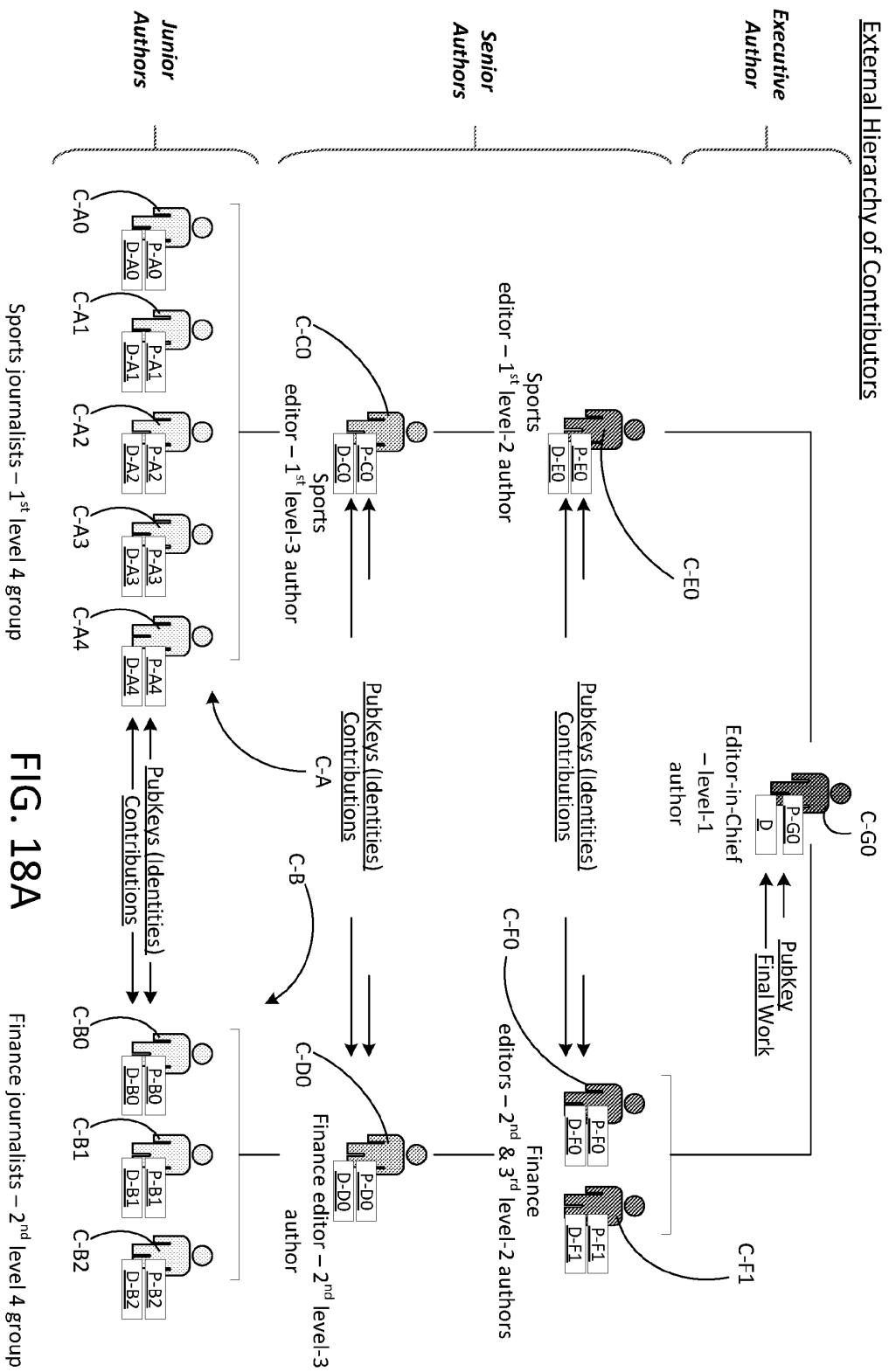


FIG. 16

FIG. 17

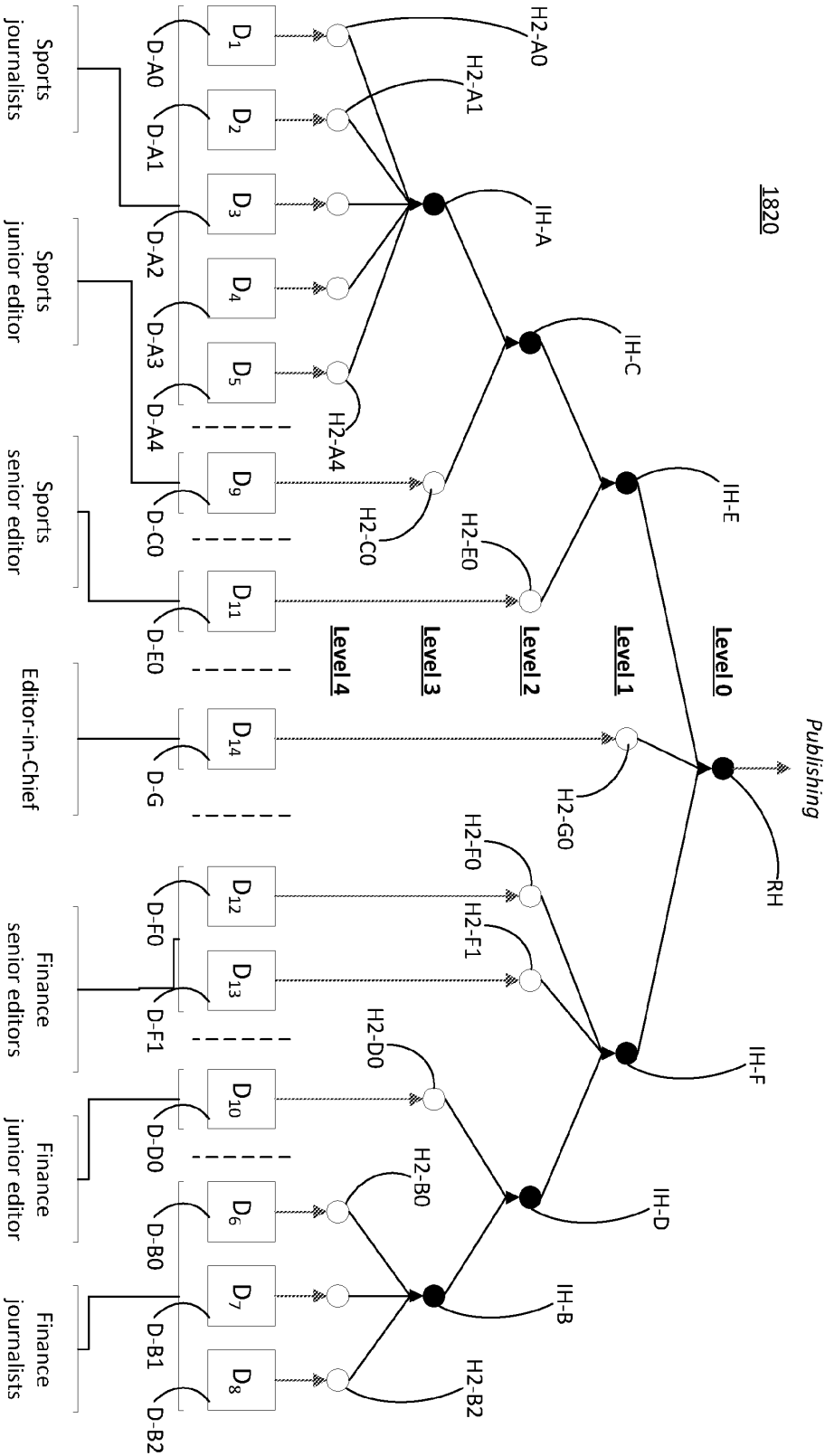




Generalised hash tree

1820

FIG. 18B



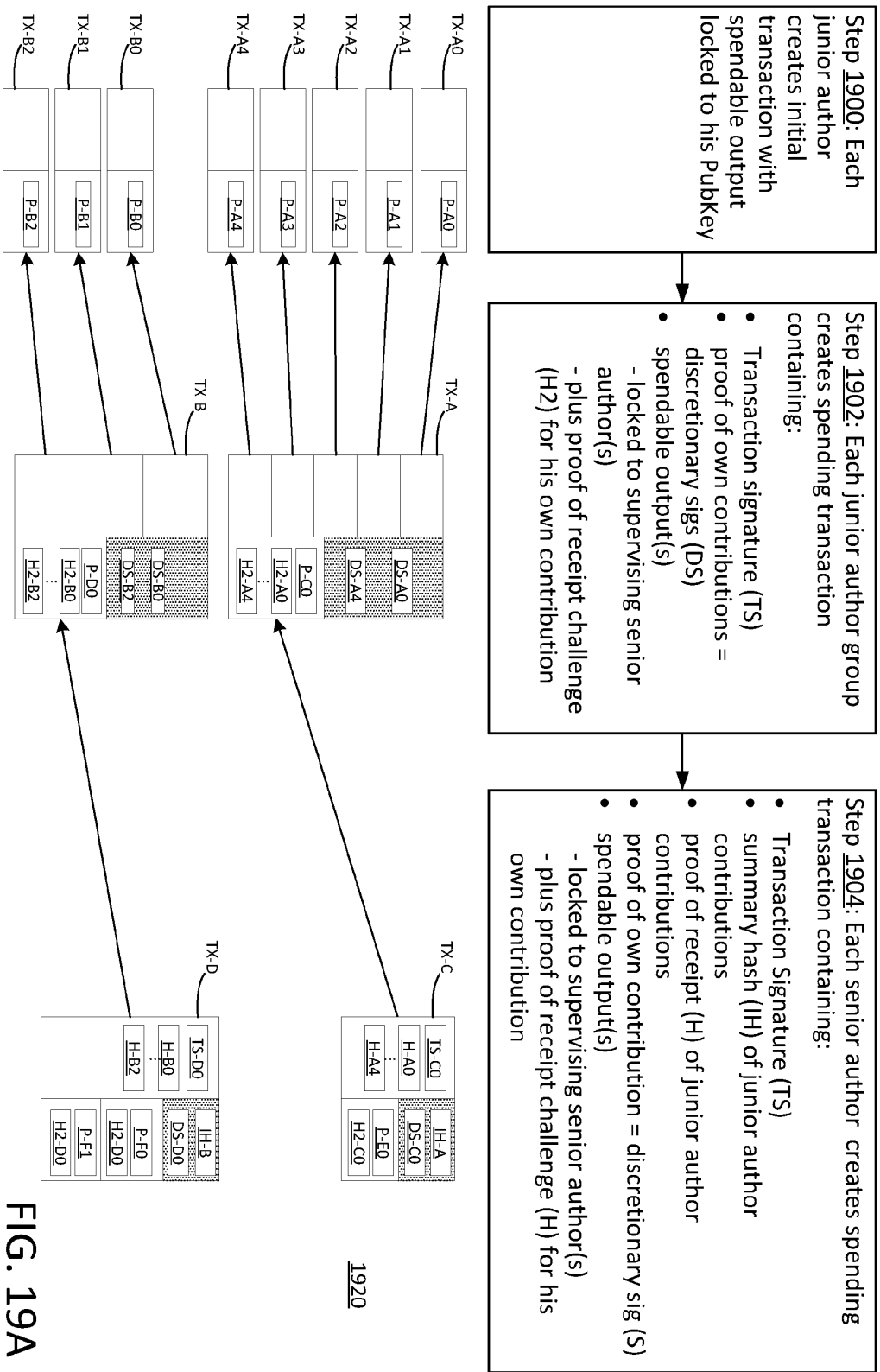
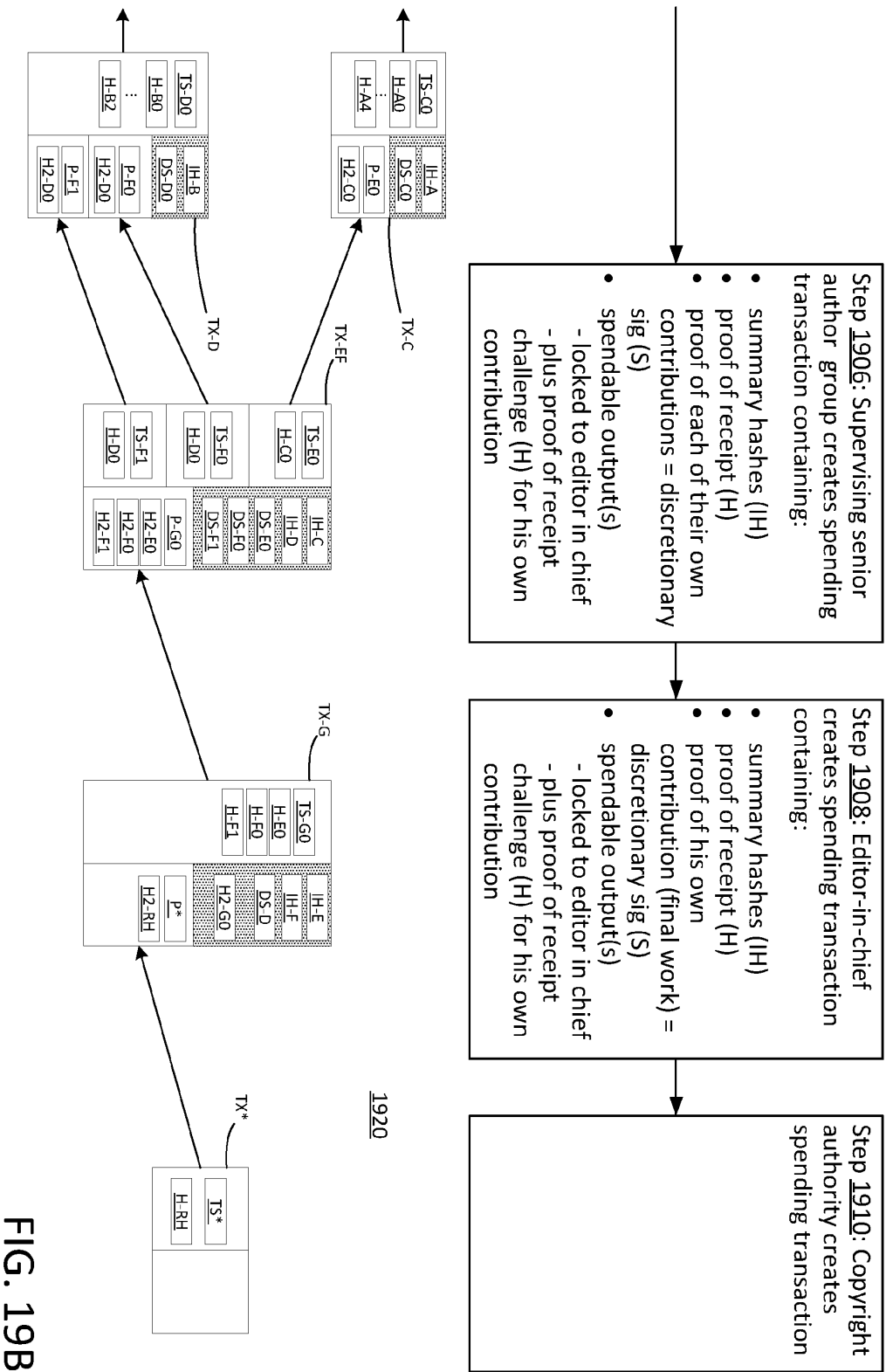


FIG. 19A



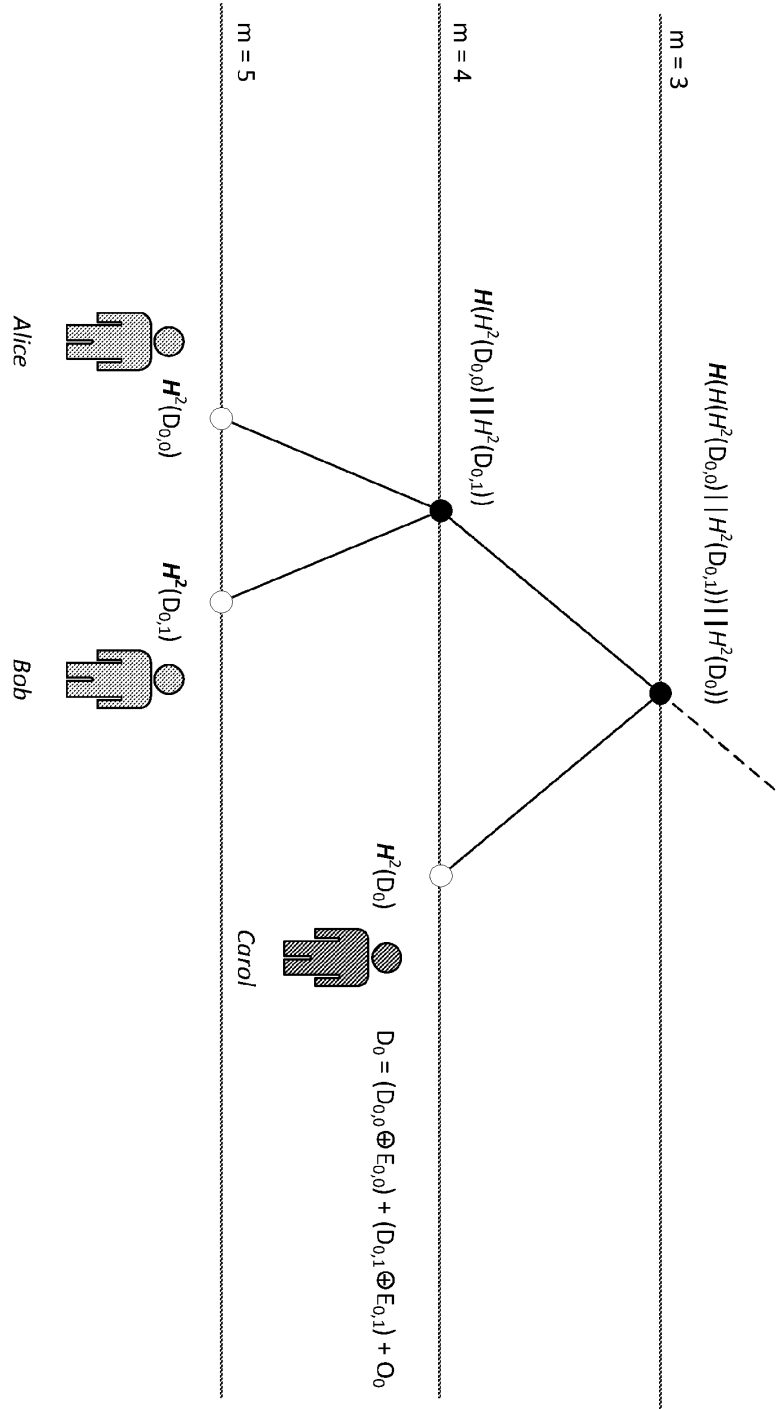


FIG. 20

FIG. 21

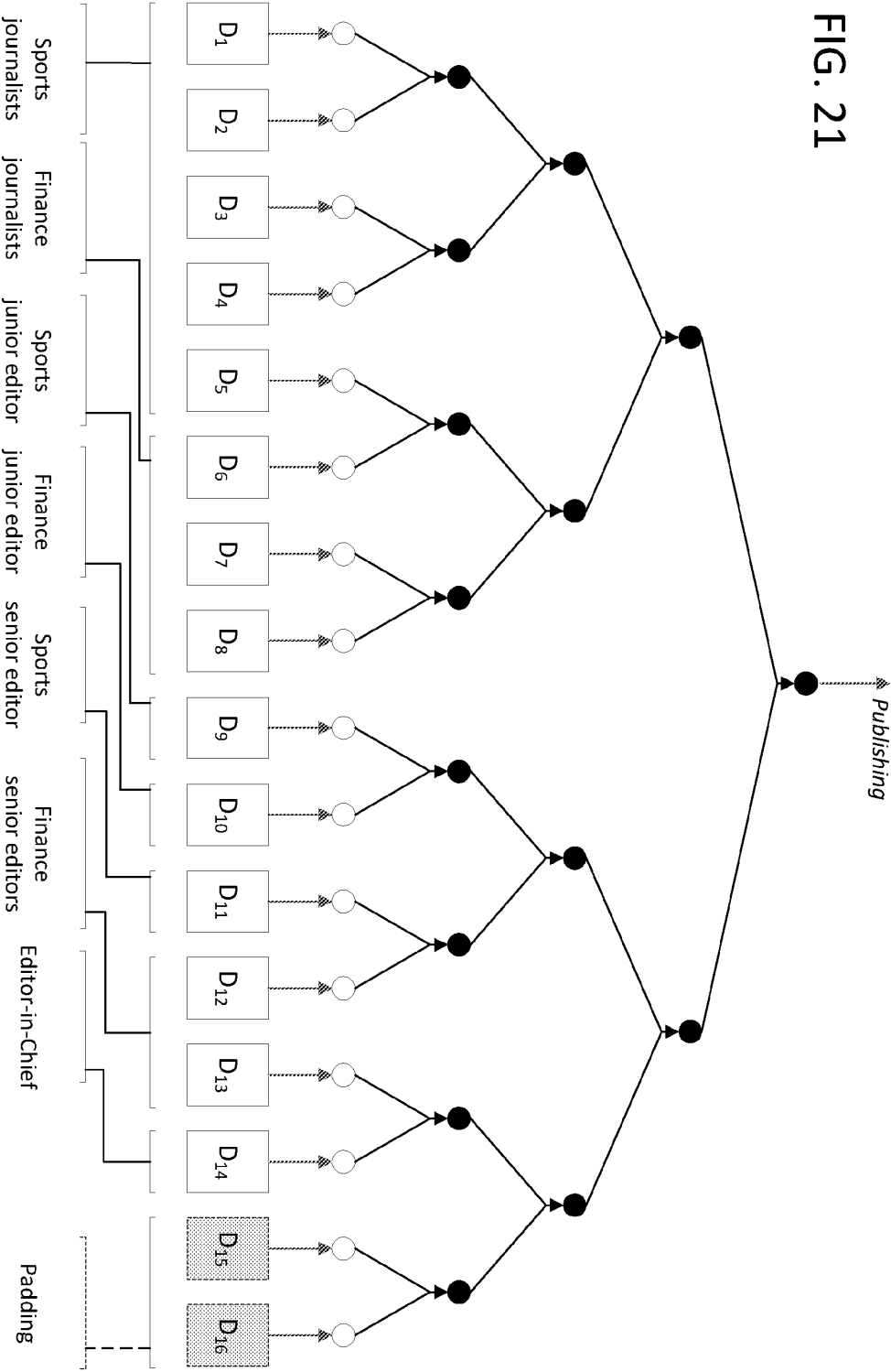


FIG. 22

The diagram illustrates a game tree for a 5-player game. The root node is labeled (0) . The tree branches into three main paths: $(0,0)$, $(0,1)$, and $(0,2)$. The $(0,0)$ path further branches into $(0,0,0)$ and $(0,0,1)$. The $(0,1)$ path branches into $(0,1,1)$, $(0,1,2)$, and $(0,1,0)$. The $(0,2)$ path branches into $(0,2,1)$ and $(0,2,0)$. The tree continues with further branching, leading to terminal nodes labeled with 5-tuples of coordinates. Some nodes are marked with a shaded circle, indicating a player's turn. The terminal nodes are labeled with 5-tuples of coordinates: $(0,0,0,0,0)$, $(0,0,0,0,1)$, $(0,0,0,0,2)$, $(0,0,0,0,3)$, $(0,0,0,0,4)$, $(0,1,0,0,0)$, $(0,1,0,0,1)$, $(0,1,0,0,2)$, $(0,1,0,0,3)$, $(0,1,0,0,4)$, $(0,2,0,0,0)$, $(0,2,0,0,1)$, $(0,2,0,0,2)$, $(0,2,0,0,3)$, $(0,2,0,0,4)$, $(0,2,0,0,5)$, $(0,2,0,0,6)$, $(0,2,0,0,7)$, $(0,2,0,0,8)$, $(0,2,0,0,9)$, $(0,2,0,0,10)$, $(0,2,0,0,11)$, $(0,2,0,0,12)$, $(0,2,0,0,13)$, $(0,2,0,0,14)$, $(0,2,0,0,15)$, $(0,2,0,0,16)$, $(0,2,0,0,17)$, $(0,2,0,0,18)$, $(0,2,0,0,19)$, $(0,2,0,0,20)$, $(0,2,0,0,21)$, $(0,2,0,0,22)$, $(0,2,0,0,23)$, $(0,2,0,0,24)$, $(0,2,0,0,25)$, $(0,2,0,0,26)$, $(0,2,0,0,27)$, $(0,2,0,0,28)$, $(0,2,0,0,29)$, $(0,2,0,0,30)$, $(0,2,0,0,31)$, $(0,2,0,0,32)$, $(0,2,0,0,33)$, $(0,2,0,0,34)$, $(0,2,0,0,35)$, $(0,2,0,0,36)$, $(0,2,0,0,37)$, $(0,2,0,0,38)$, $(0,2,0,0,39)$, $(0,2,0,0,40)$, $(0,2,0,0,41)$, $(0,2,0,0,42)$, $(0,2,0,0,43)$, $(0,2,0,0,44)$, $(0,2,0,0,45)$, $(0,2,0,0,46)$, $(0,2,0,0,47)$, $(0,2,0,0,48)$, $(0,2,0,0,49)$, $(0,2,0,0,50)$, $(0,2,0,0,51)$, $(0,2,0,0,52)$, $(0,2,0,0,53)$, $(0,2,0,0,54)$, $(0,2,0,0,55)$, $(0,2,0,0,56)$, $(0,2,0,0,57)$, $(0,2,0,0,58)$, $(0,2,0,0,59)$, $(0,2,0,0,60)$, $(0,2,0,0,61)$, $(0,2,0,0,62)$, $(0,2,0,0,63)$, $(0,2,0,0,64)$, $(0,2,0,0,65)$, $(0,2,0,0,66)$, $(0,2,0,0,67)$, $(0,2,0,0,68)$, $(0,2,0,0,69)$, $(0,2,0,0,70)$, $(0,2,0,0,71)$, $(0,2,0,0,72)$, $(0,2,0,0,73)$, $(0,2,0,0,74)$, $(0,2,0,0,75)$, $(0,2,0,0,76)$, $(0,2,0,0,77)$, $(0,2,0,0,78)$, $(0,2,0,0,79)$, $(0,2,0,0,80)$, $(0,2,0,0,81)$, $(0,2,0,0,82)$, $(0,2,0,0,83)$, $(0,2,0,0,84)$, $(0,2,0,0,85)$, $(0,2,0,0,86)$, $(0,2,0,0,87)$, $(0,2,0,0,88)$, $(0,2,0,0,89)$, $(0,2,0,0,90)$, $(0,2,0,0,91)$, $(0,2,0,0,92)$, $(0,2,0,0,93)$, $(0,2,0,0,94)$, $(0,2,0,0,95)$, $(0,2,0,0,96)$, $(0,2,0,0,97)$, $(0,2,0,0,98)$, $(0,2,0,0,99)$, $(0,2,0,0,100)$.

FIG. 23

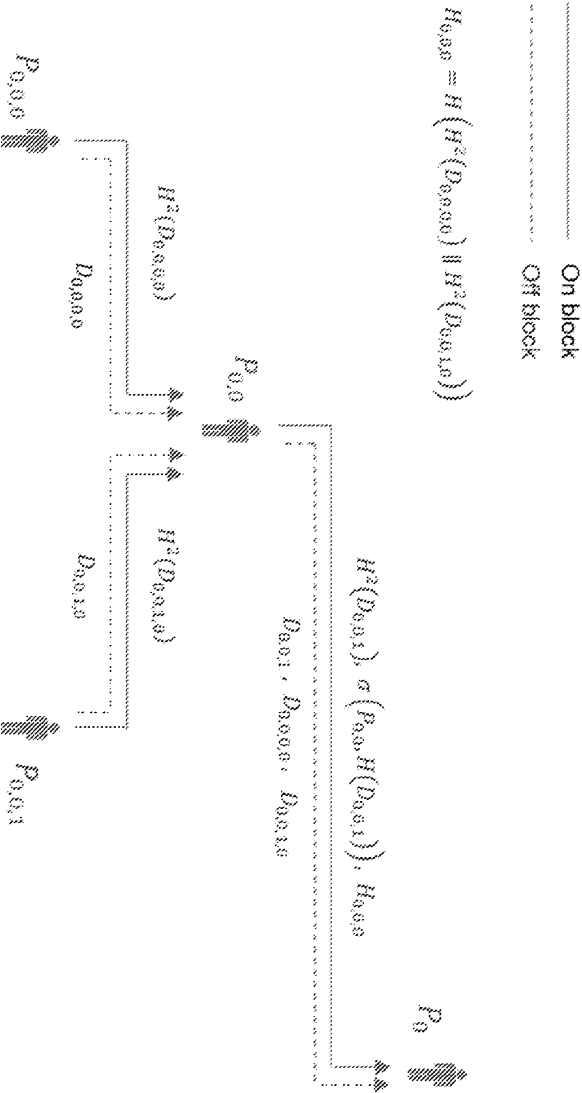
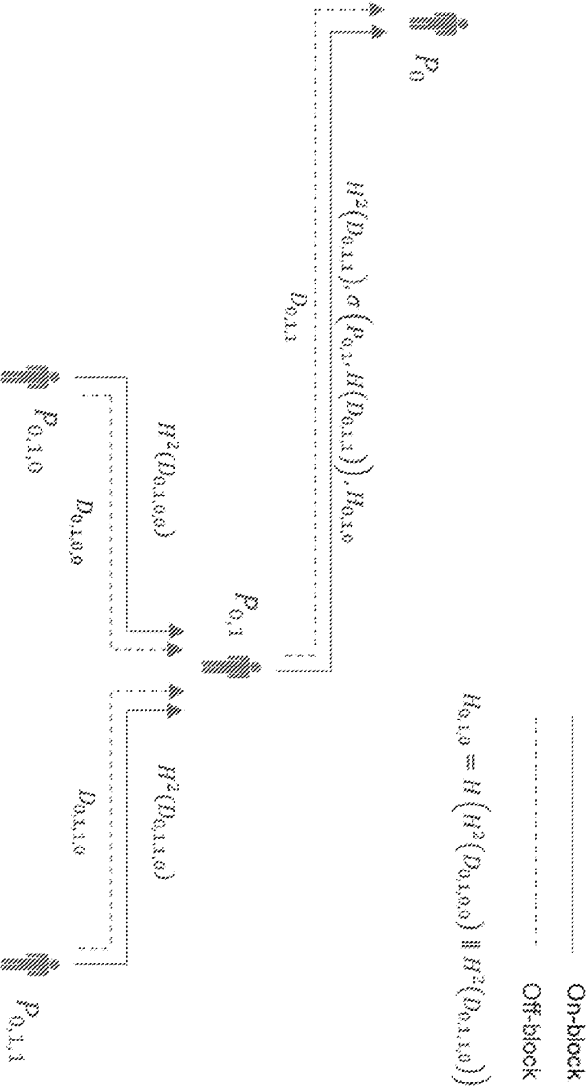


FIG. 24



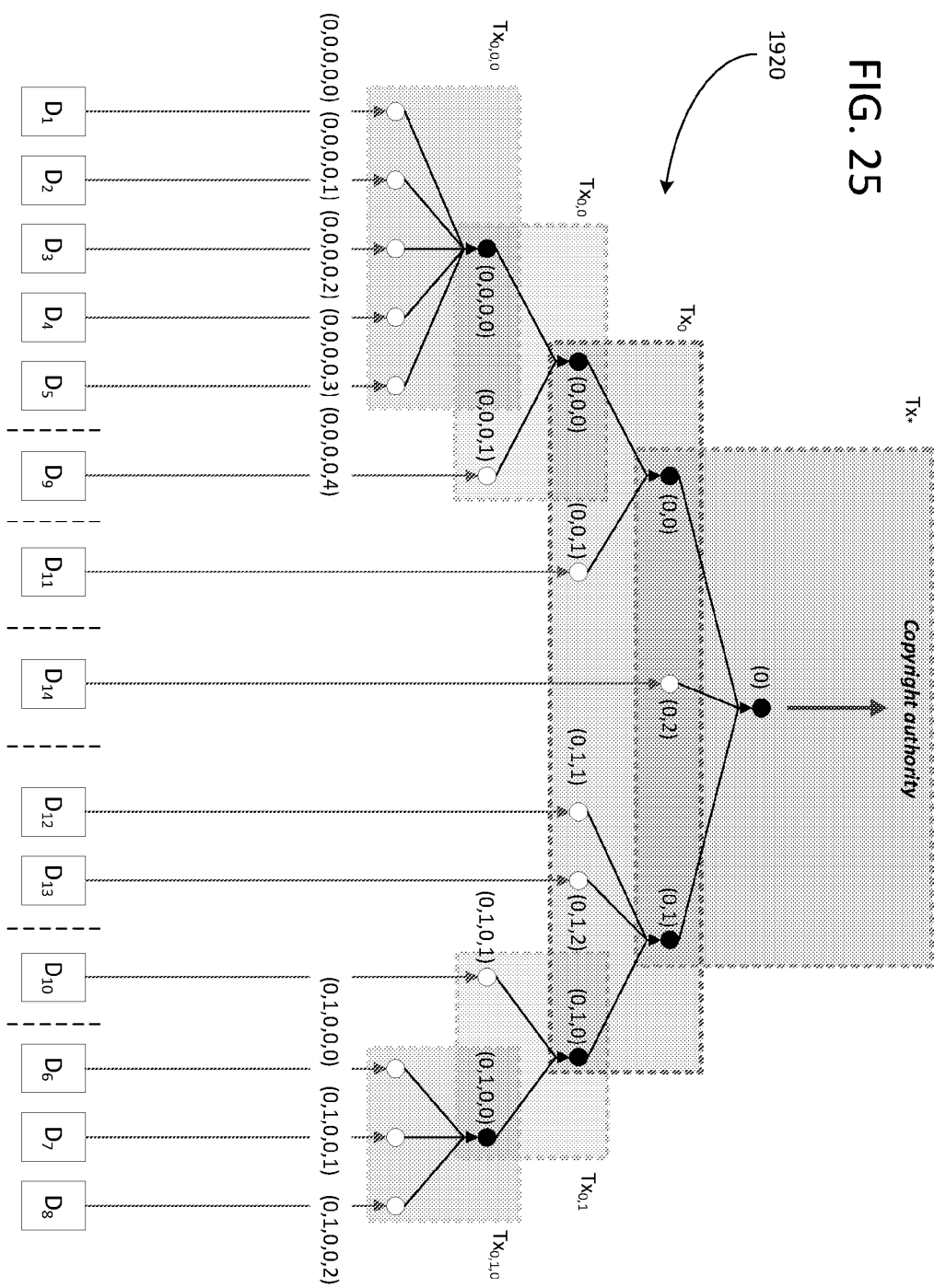


FIG. 26

1920

