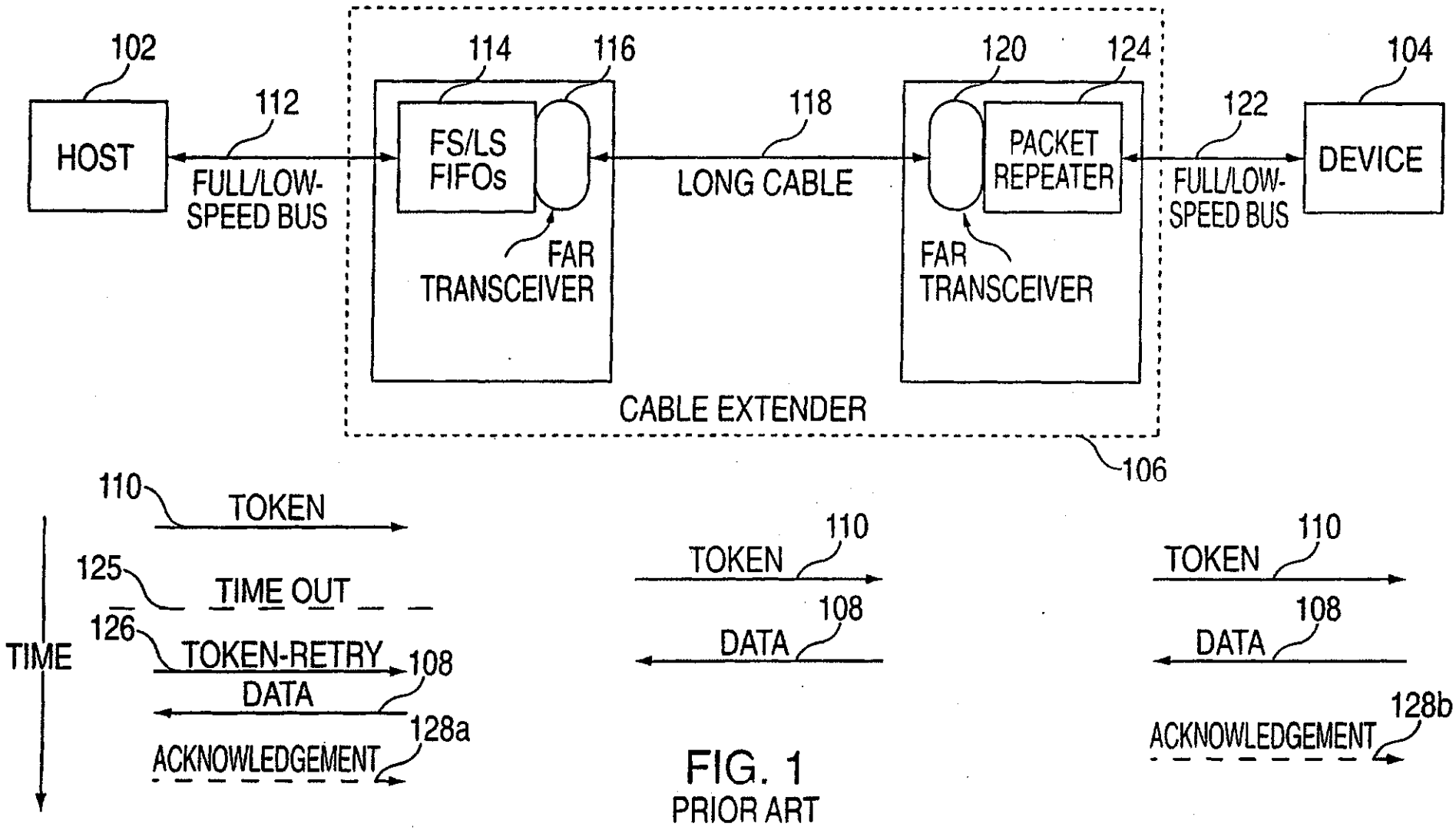


FIG. 1
PRIOR ART

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27 SEP 2005

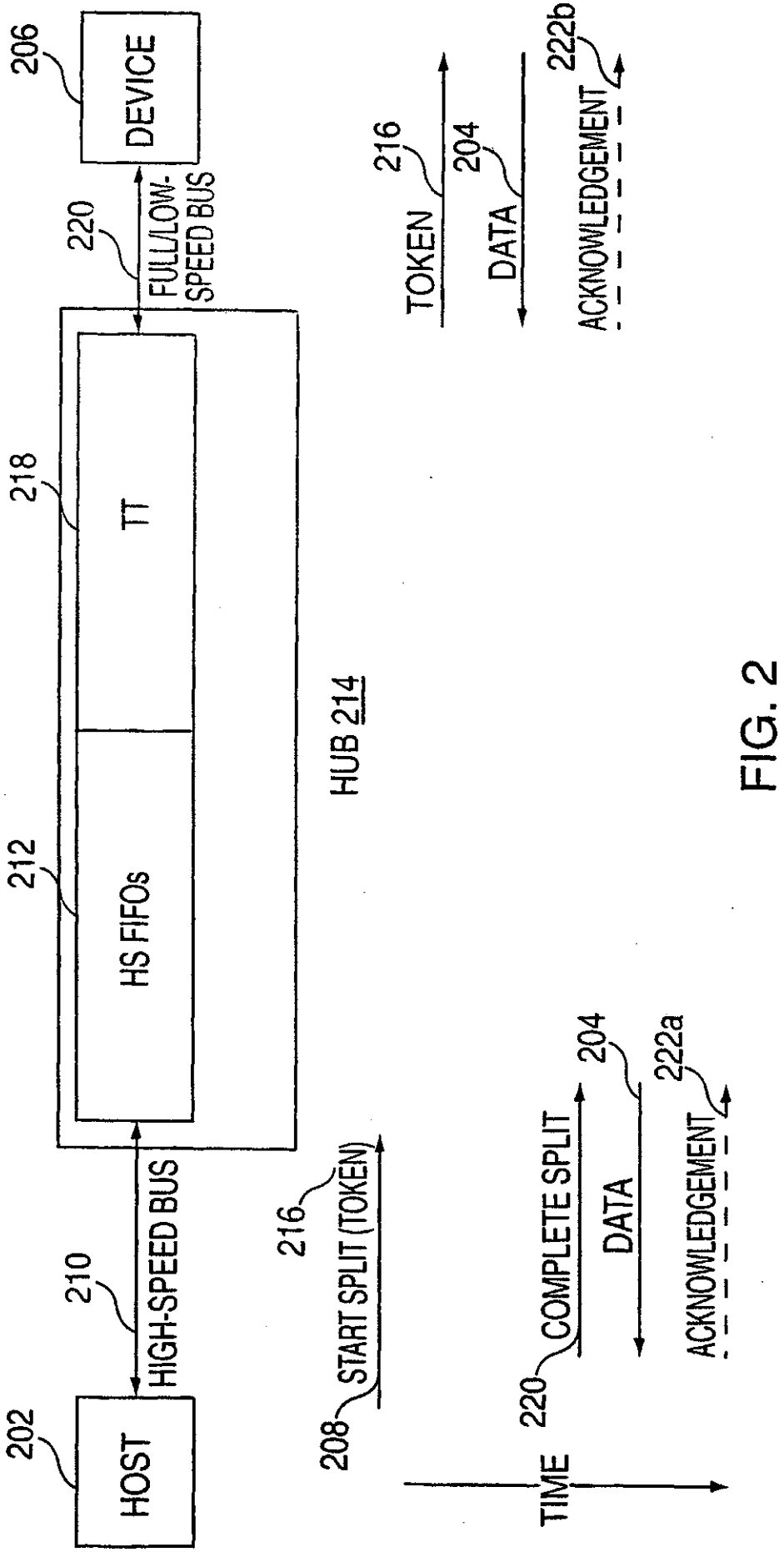

202
HOST
210
HIGH-SPEED BUS
206
DEVICE
220
FULL/LOW-SPEED BUS
218
TT
212
HS FIFOs
HUB 214
216
START SPLIT (TOKEN)
208
TIME
220
COMPLETE SPLIT
204
DATA
222a
ACKNOWLEDGEMENT
216
TOKEN
204
DATA
222b
ACKNOWLEDGEMENT

FIG. 2

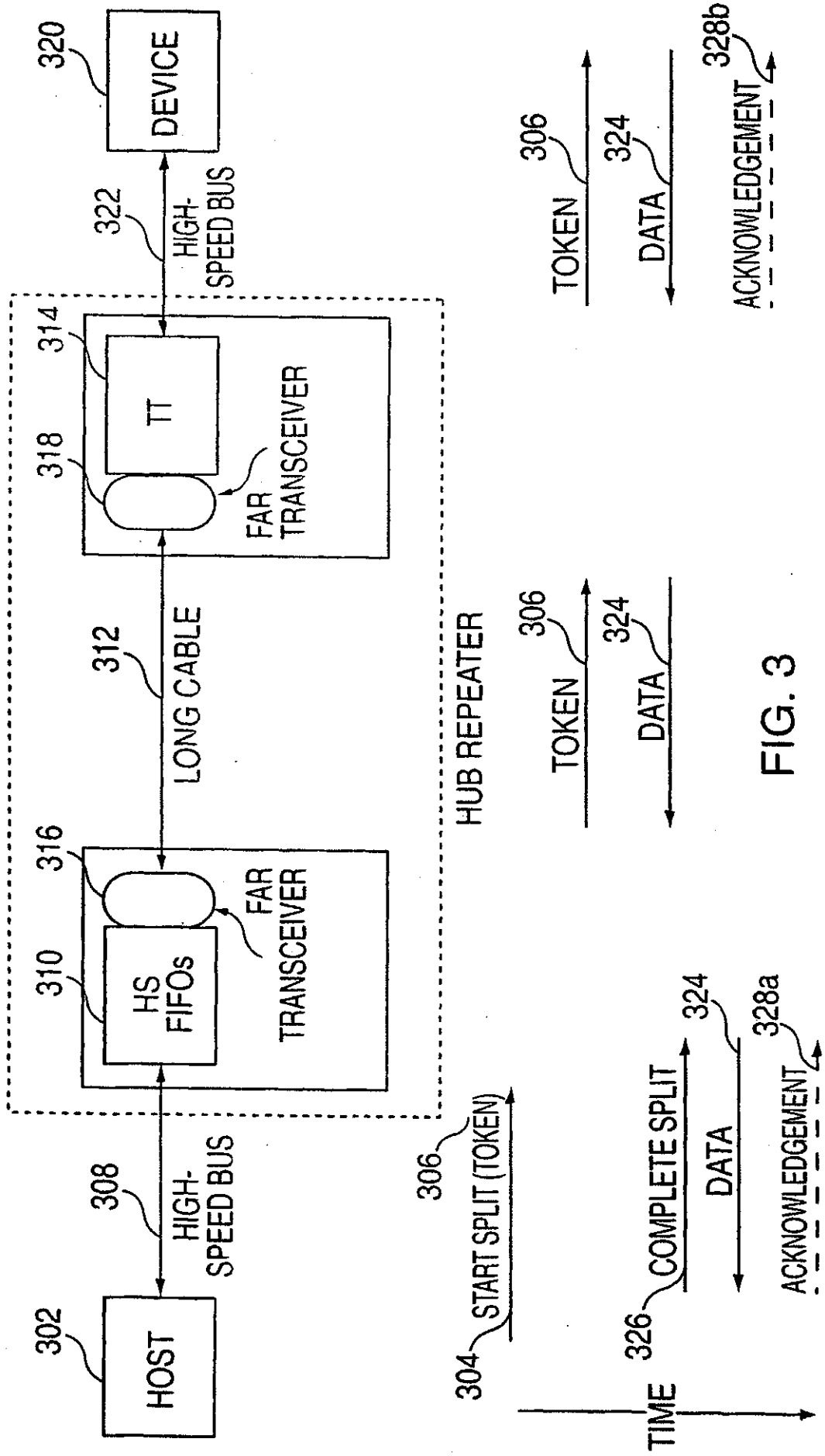

320
DEVICE
322
HIGH-SPEED BUS
314
TT
318
FAR TRANSCEIVER
312
LONG CABLE
316
FAR TRANSCEIVER
310
HS FIFOs
HUB REPEATER
308
HIGH-SPEED BUS
302
HOST
306
TOKEN
324
DATA
328b
ACKNOWLEDGEMENT
306
TOKEN
324
DATA
306
START SPLIT (TOKEN)
304
326
COMPLETE SPLIT
324
DATA
328a
ACKNOWLEDGEMENT
TIME

FIG. 3

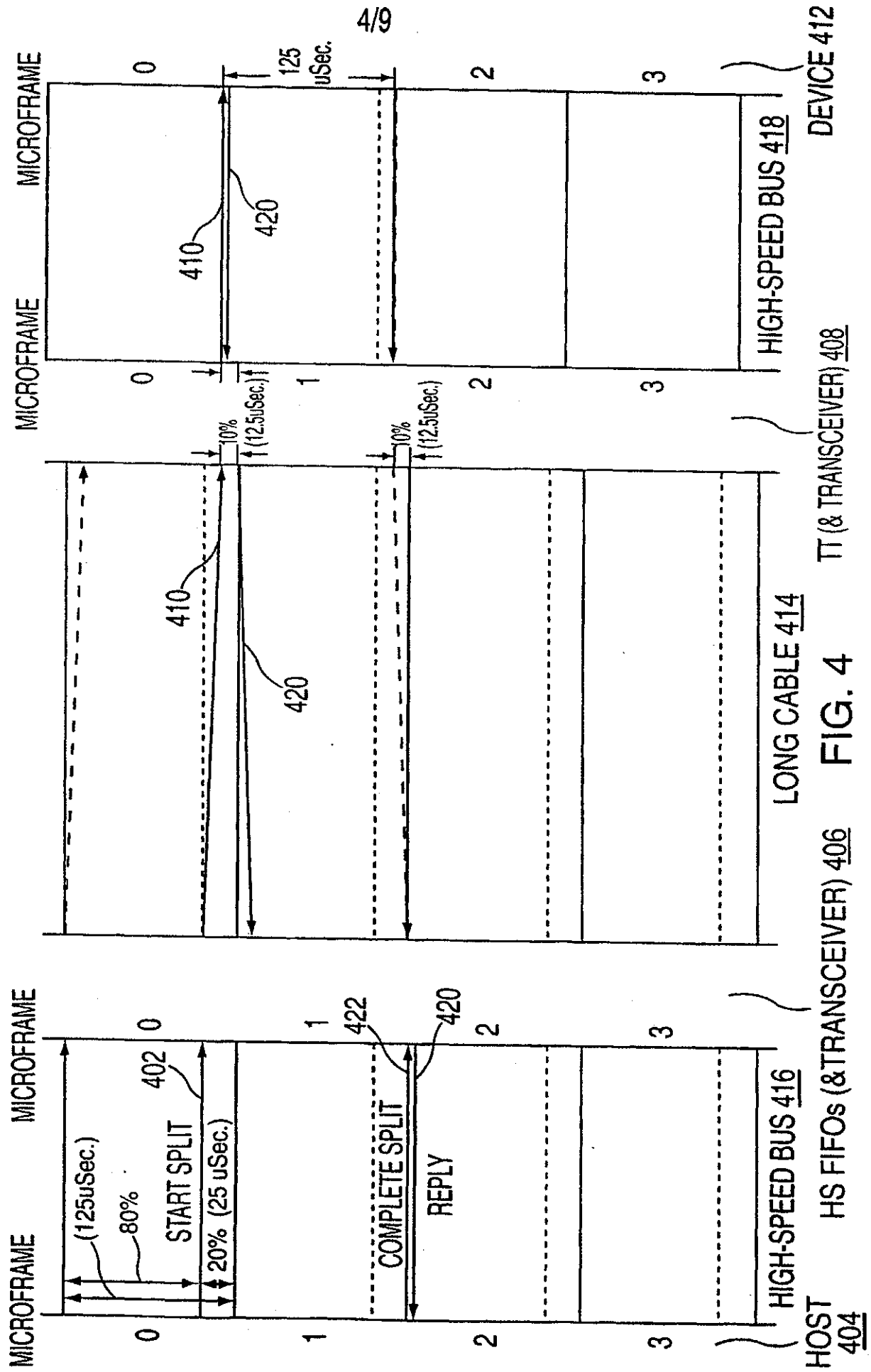

MICROFRAME
MICROFRAME
(125uSec.)
80%
START SPLIT
402
20% (25 uSec.)
COMPLETE SPLIT
422
REPLY
420
HIGH-SPEED BUS 416
HOST 404
HS FIFOs (&TRANSCEIVER) 406
LONG CABLE 414
TT (& TRANSCEIVER) 408
HIGH-SPEED BUS 418
DEVICE 412
125 uSec.
410
10%
(12.5uSec.)
0
1
2
3

FIG. 4

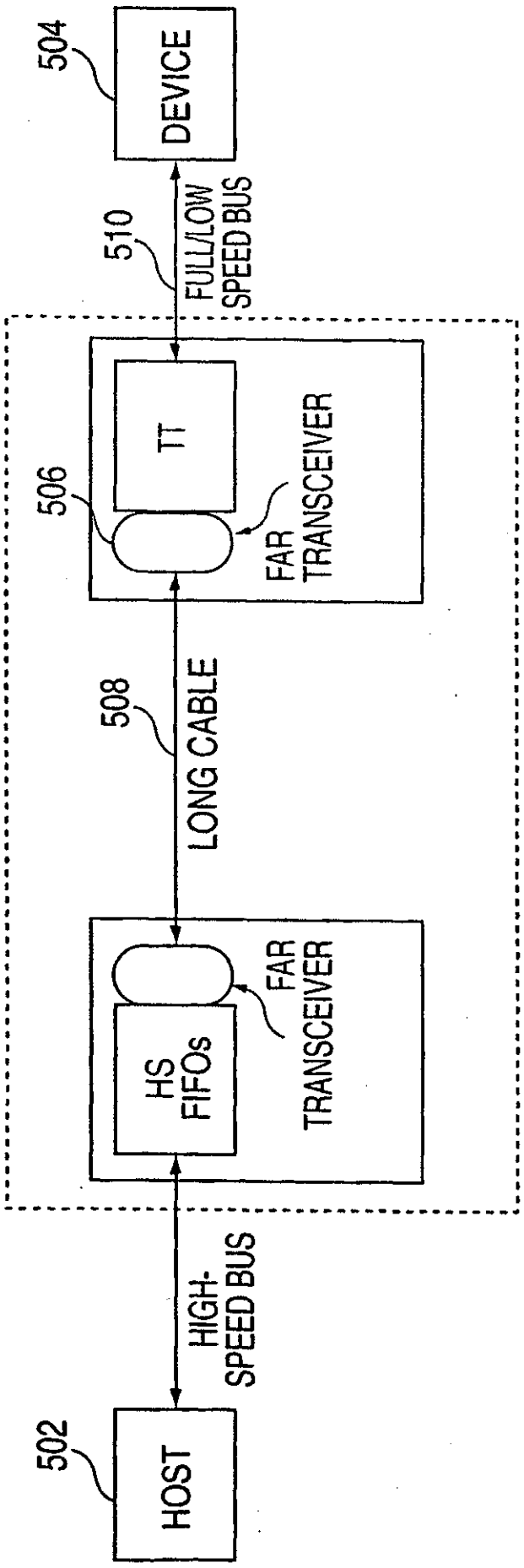

504
DEVICE
510
FULL/LOW SPEED BUS
506
TT
FAR TRANSCEIVER
508
LONG CABLE
HS FIFOs
FAR TRANSCEIVER
HUB REPEATER
HIGH-SPEED BUS
502
HOST

FIG. 5

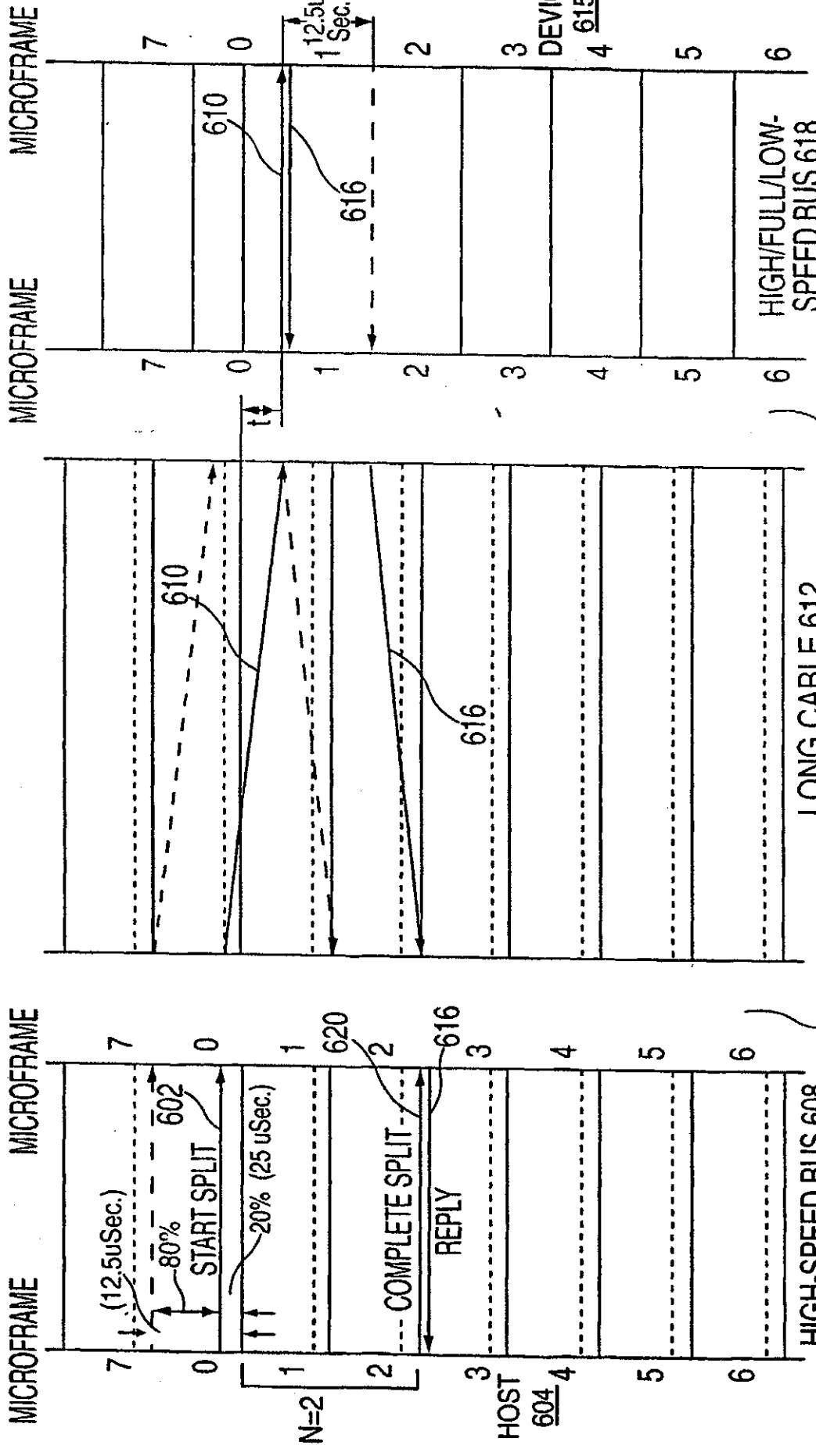

MICROFRAME
MICROFRAME
MICROFRAME
MICROFRAME
(12.5uSec.)
80%
602
START SPLIT
20% (25 uSec.)
COMPLETE SPLIT
REPLY
620
616
610
N=2
HOST 604
HIGH-SPEED BUS 608
HS FIFOs (& TRANSCEIVER) 606
LONG CABLE 612
TT (& TRANSCEIVER) 614
HIGH/FULL/LOW-SPEED BUS 618
DEVICE 615
12.5u Sec.
t

FIG. 6

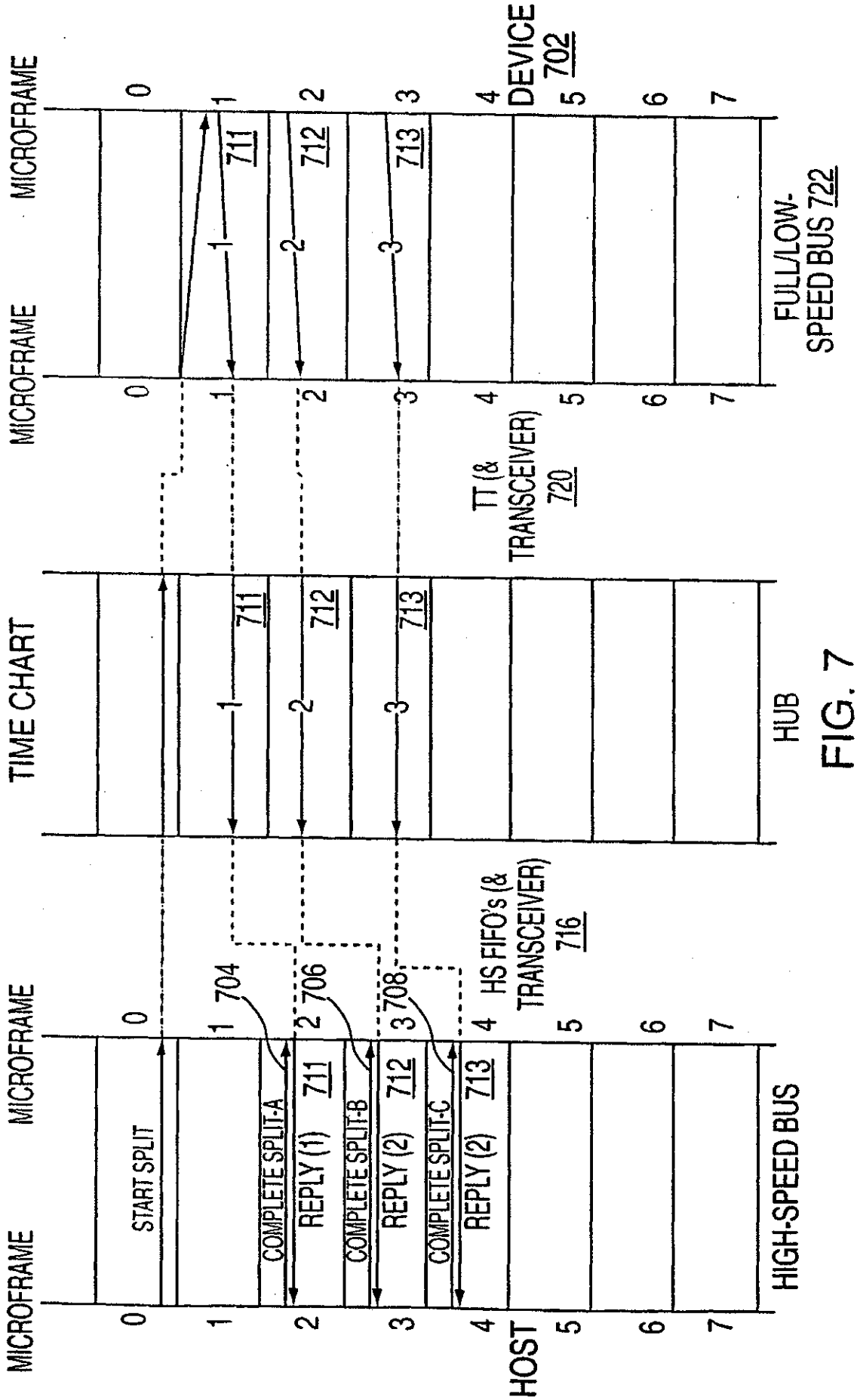


FIG. 7
PRIOR ART

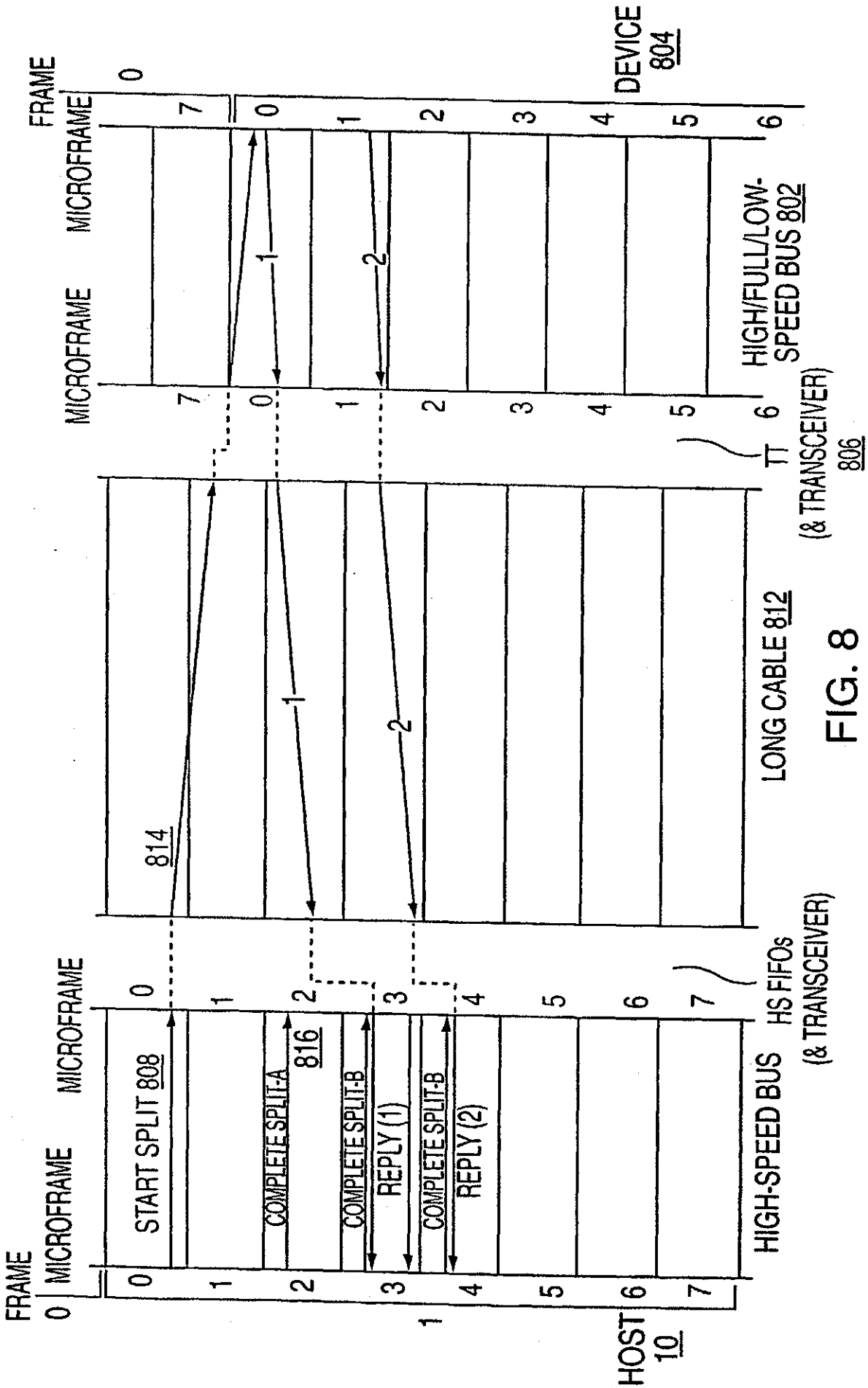

FRAME
MICROFRAME
HOST 10
START SPLIT 808
COMPLETE SPLIT-A 816
COMPLETE SPLIT-B
REPLY (1)
COMPLETE SPLIT-B
REPLY (2)
HIGH-SPEED BUS
HS FIFOs (& TRANSCEIVER)
814
LONG CABLE 812
TT (& TRANSCEIVER) 806
HIGH/FULL/LOW-SPEED BUS 802
DEVICE 804

FIG. 8

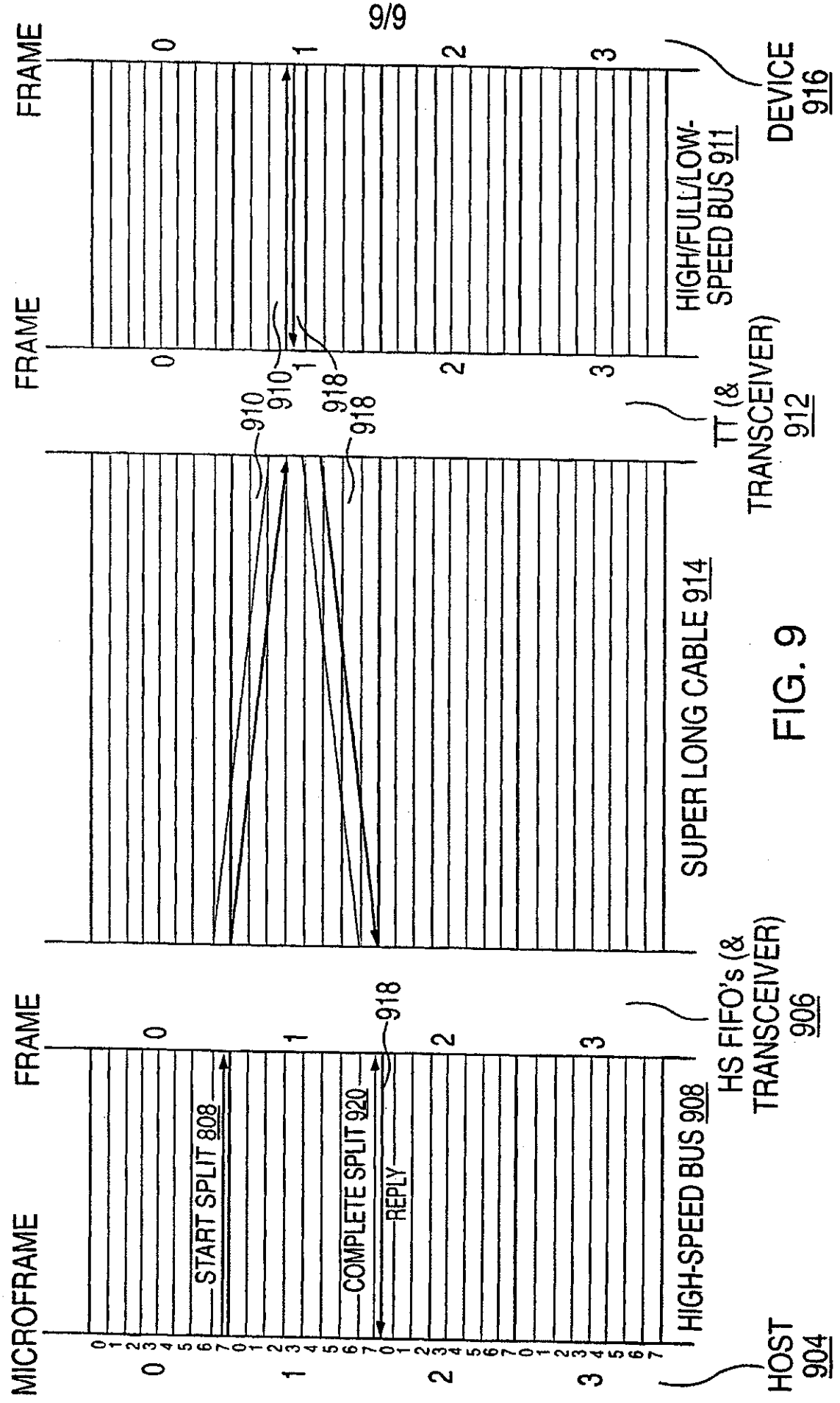

MICROFRAME
FRAME
FRAME
FRAME
0
1
2
3
START SPLIT 808
COMPLETE SPLIT 920
REPLY
910
918
HIGH-SPEED BUS 908
HS FIFO's (& TRANSCEIVER) 906
SUPER LONG CABLE 914
TT (& TRANSCEIVER) 912
HIGH/FULL/LOW-SPEED BUS 911
DEVICE 916
HOST 904

FIG. 9