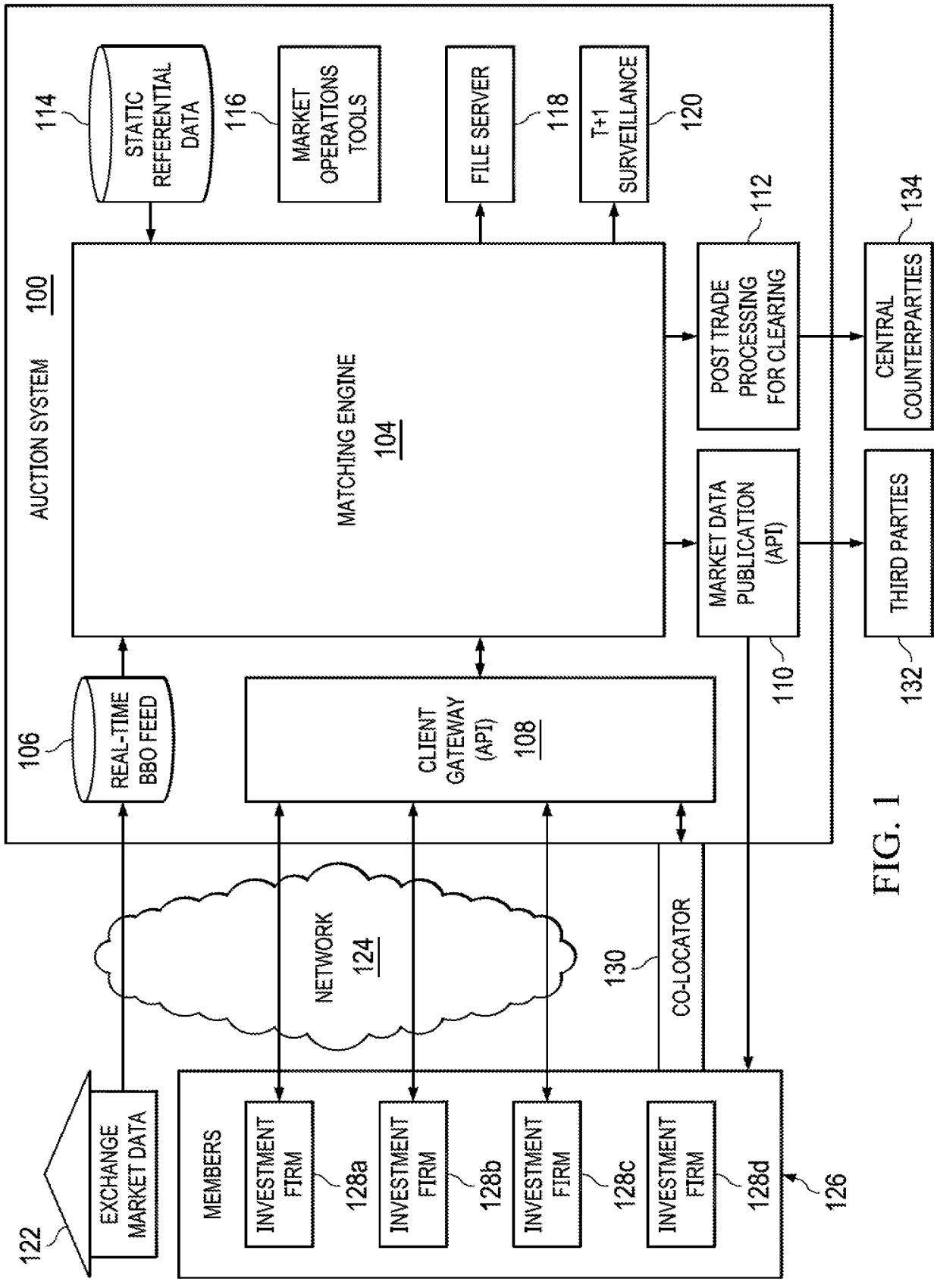

AUCTION SYSTEM 100
STATIC REFERENTIAL DATA 114
MARKET OPERATIONS TOOLS 116
FILE SERVER 118
T+1 SURVEILLANCE 120
MATCHING ENGINE 104
POST TRADE PROCESSING FOR CLEARING 112
CENTRAL COUNTERPARTIES 134
MARKET DATA PUBLICATION (API)
THIRD PARTIES 132
110
REAL-TIME BBO FEED 106
CLIENT GATEWAY (API) 108
NETWORK 124
CO-LOCATOR 130
EXCHANGE MARKET DATA 122
MEMBERS 126
INVESTMENT FIRM 128a
INVESTMENT FIRM 128b
INVESTMENT FIRM 128c
INVESTMENT FIRM 128d

FIG. 1

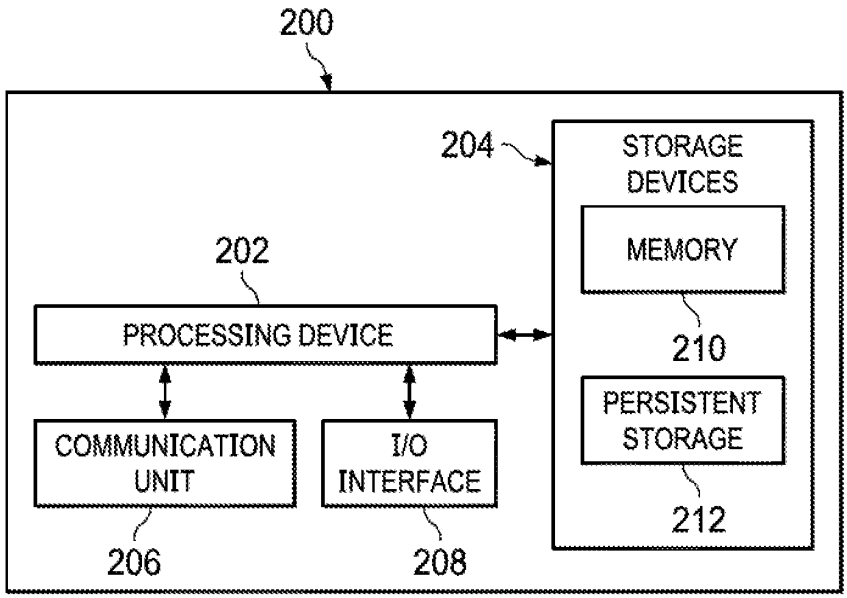


FIG. 2

300

302		304	306		308
BID		LIMIT PRICE	ASK		EXECUTABLE QTY
BUY REF	VOLUME		SELL REF	VOLUME	
		11			0
		10.5			0
O3	75	10			75
O2	100	9.5			175
O1	25	9			200
		8.5			200
		8	O4	200	200
		7.5			0
		7			0
		6.5			0
		6			0
		5.5			0

310

FIG. 3

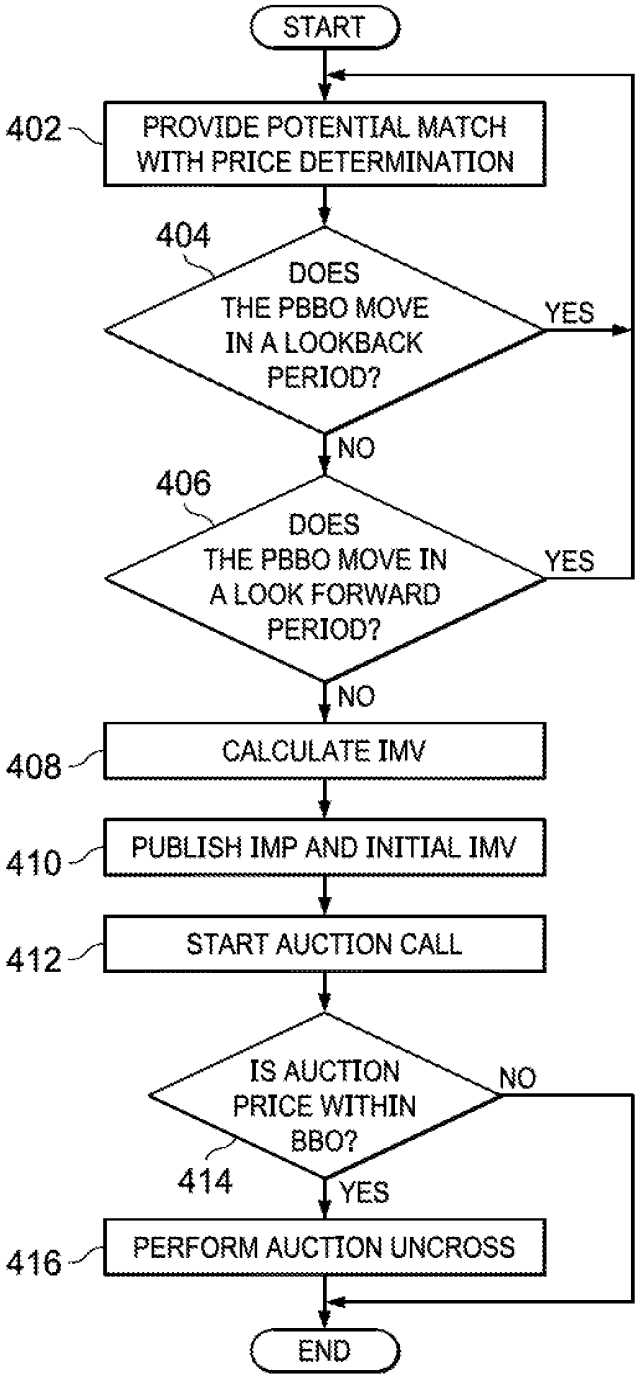

START
402
PROVIDE POTENTIAL MATCH WITH PRICE DETERMINATION
404
DOES THE PBBO MOVE IN A LOOKBACK PERIOD?
YES
NO
406
DOES THE PBBO MOVE IN A LOOK FORWARD PERIOD?
YES
NO
408
CALCULATE IMV
410
PUBLISH IMP AND INITIAL IMV
412
START AUCTION CALL
IS AUCTION PRICE WITHIN BBO?
NO
414
YES
416
PERFORM AUCTION UNCROSS
END

FIG. 4

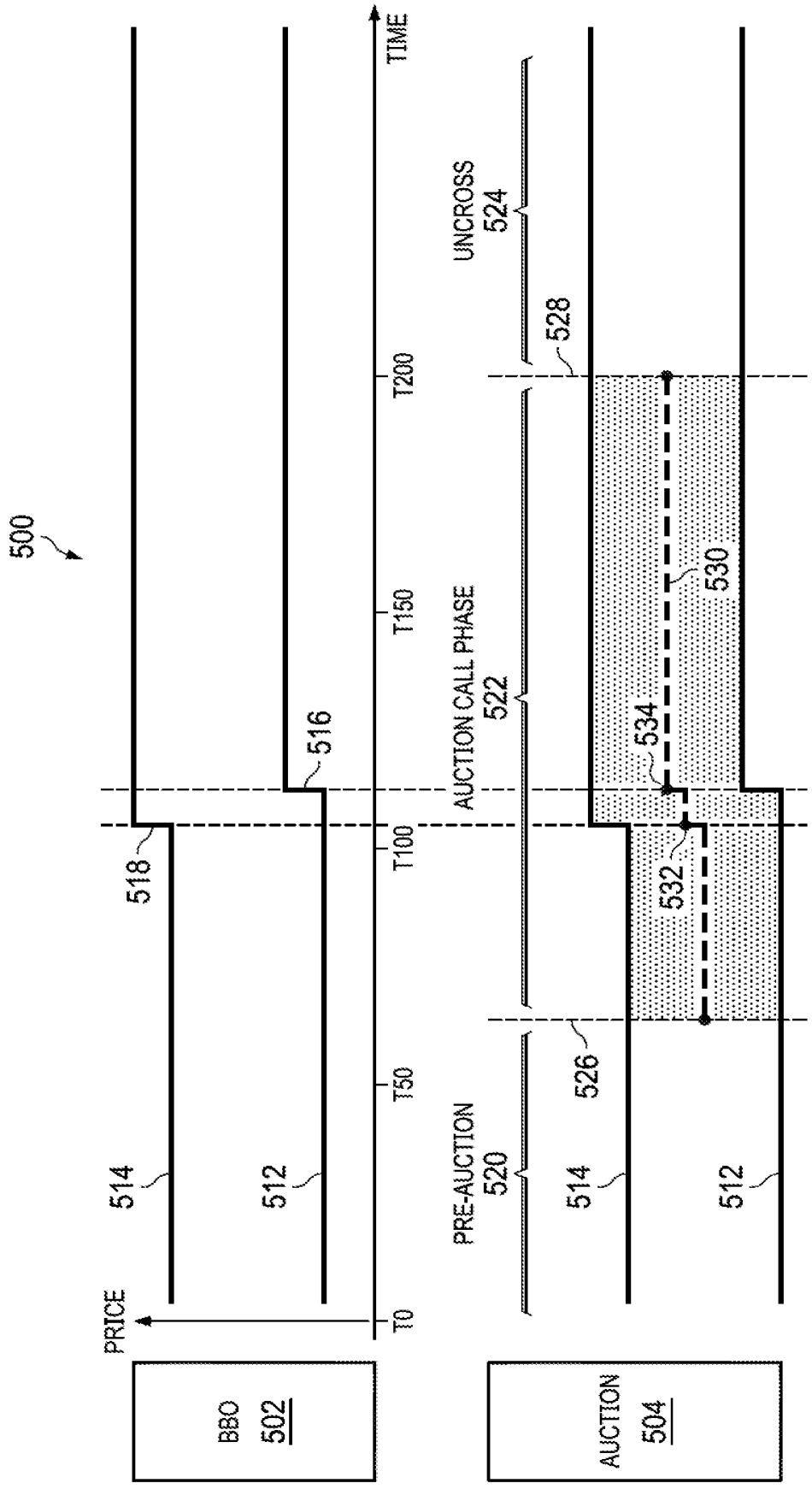

500
TIME
T200
T150
T100
T50
T0
PRICE
BBO 502
AUCTION 504
514
512
516
518
PRE-AUCTION 520
AUCTION CALL PHASE 522
UNCROSS 524
526
528
530
532
534

FIG. 5

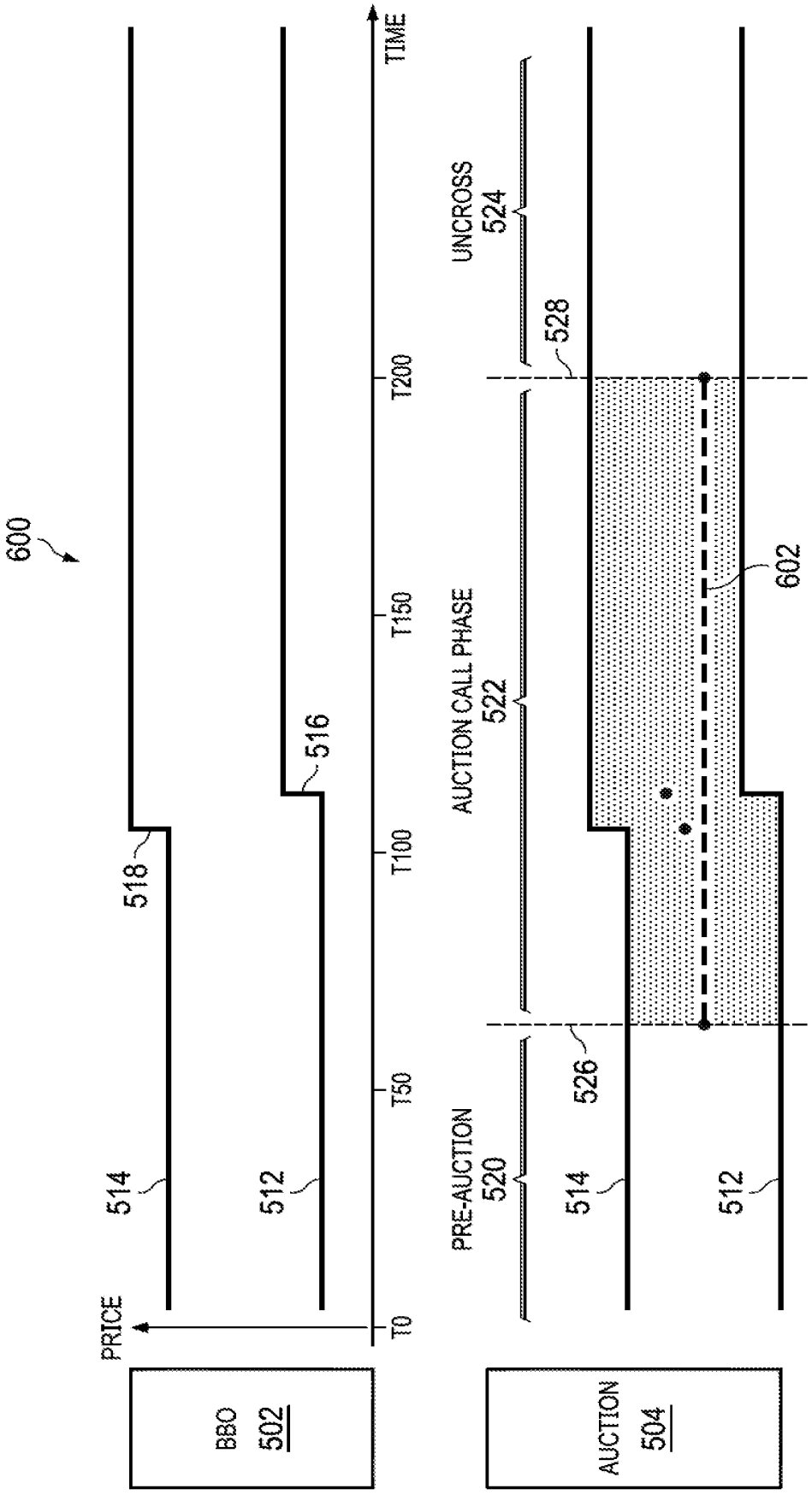

600
TIME
T0
T50
T100
T150
T200
PRICE
514
512
516
518
BBO
502
PRE-AUCTION
520
AUCTION CALL PHASE
522
UNCROSS
524
526
528
602
AUCTION
504

FIG. 6

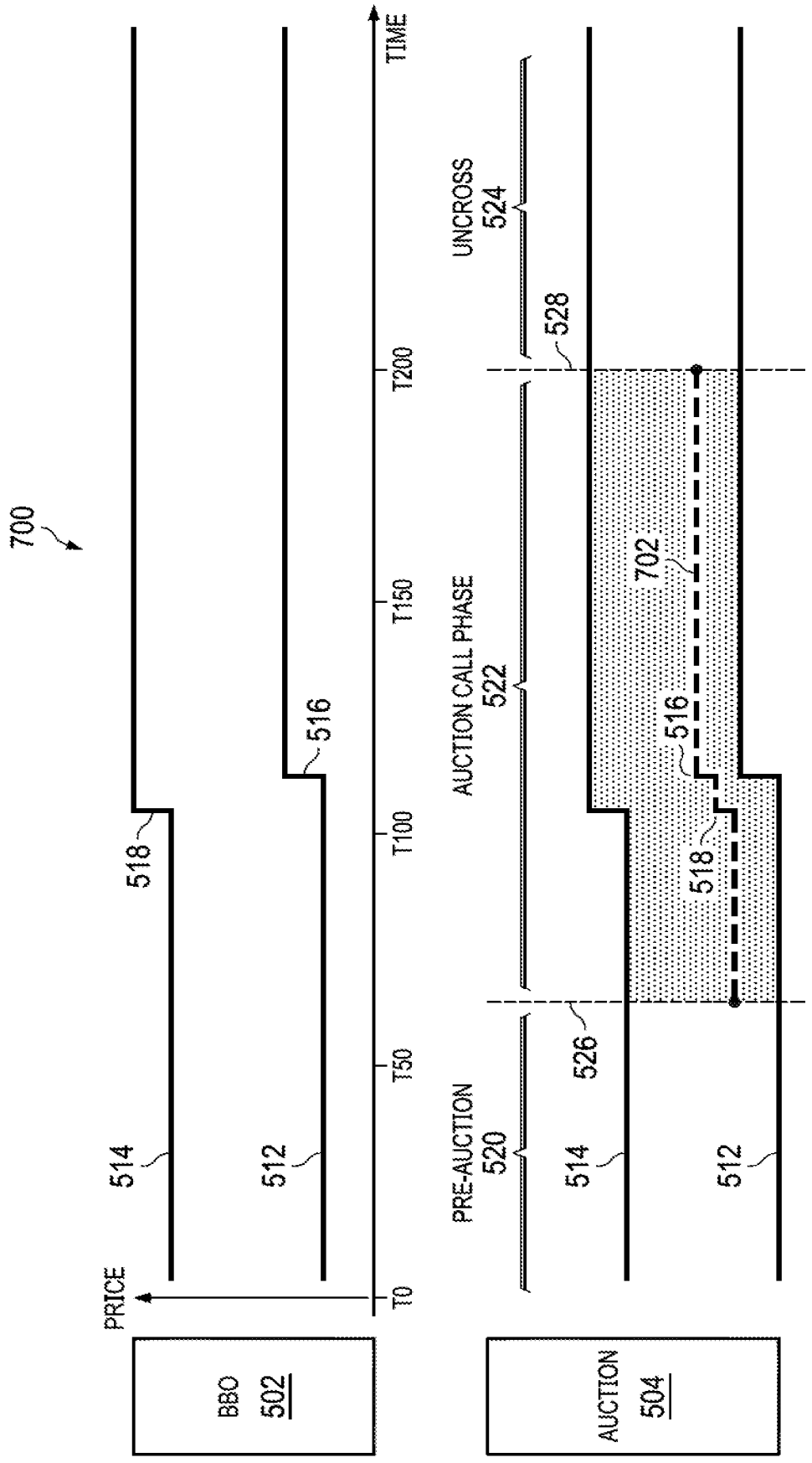

700
PRICE
TIME
T0
T50
T100
T150
T200
514
512
516
518
BBO
502
PRE-AUCTION
520
AUCTION CALL PHASE
522
UNCROSS
524
526
528
702
AUCTION
504

FIG. 7

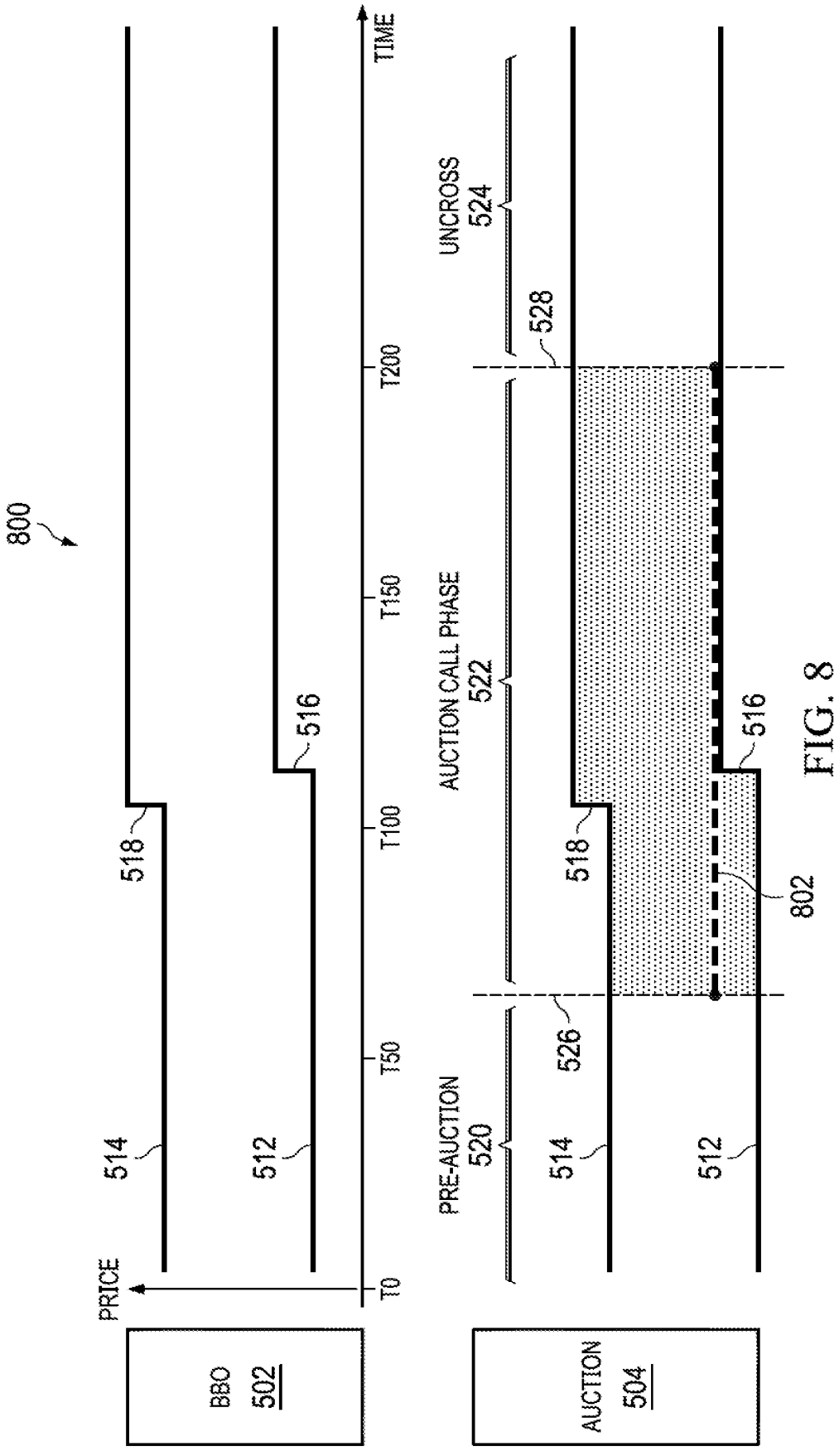

800
TIME
T0
T50
T100
T150
T200
PRICE
514
512
516
518
BBO
502
PRE-AUCTION
520
AUCTION CALL PHASE
522
UNCROSS
524
526
528
802
AUCTION
504

FIG. 8

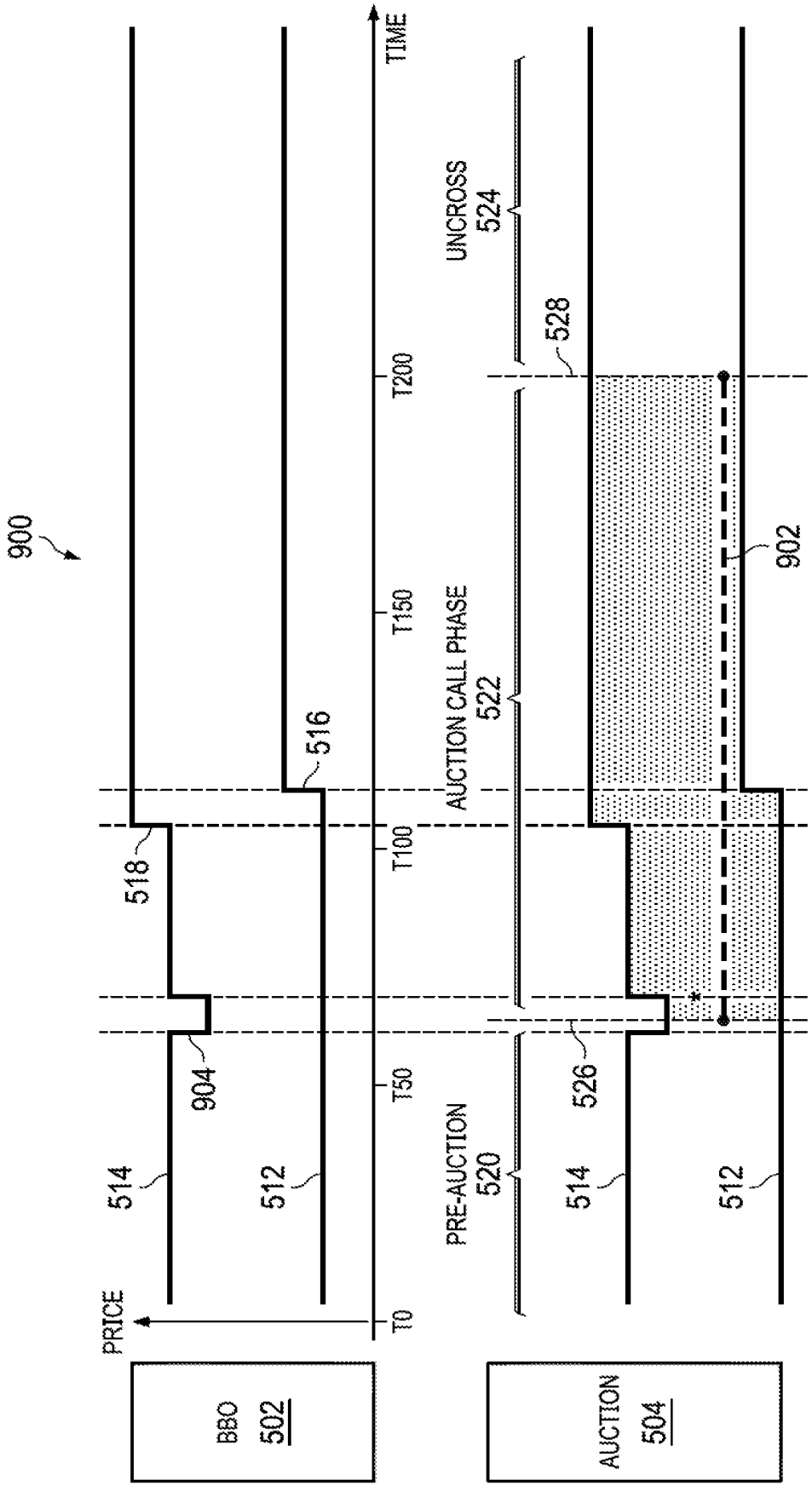

900
TIME
PRICE
T0
T50
T100
T150
T200
BBO
502
AUCTION
504
PRE-AUCTION
520
AUCTION CALL PHASE
522
UNCROSS
524
512
514
516
518
526
528
902
904

FIG. 9

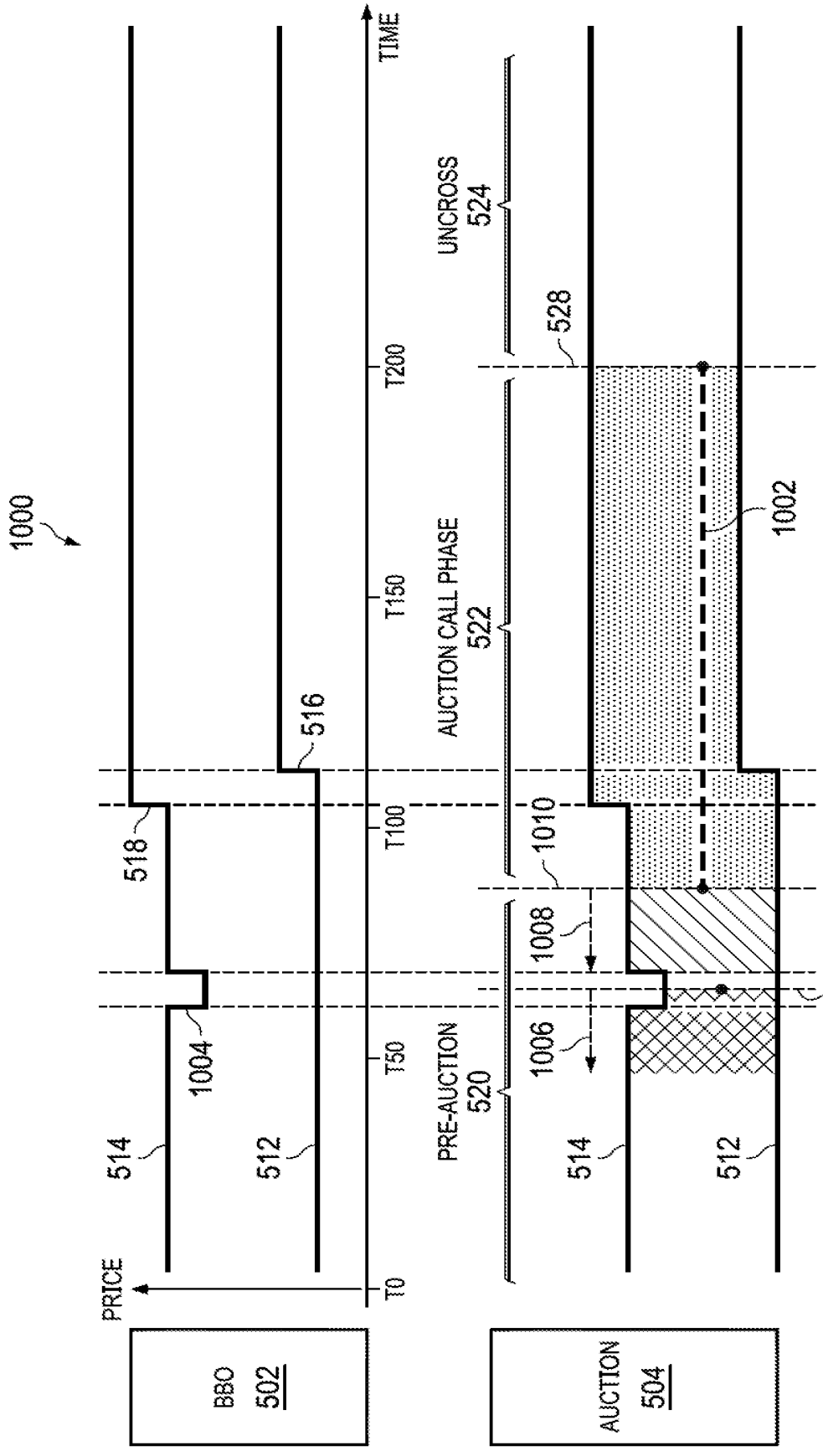

1000
TIME
T200
T150
T100
T50
T0
PRICE
BBO 502
AUCTION 504
514
512
518
516
1004
PRE-AUCTION 520
AUCTION CALL PHASE 522
UNCROSS 524
528
1002
1010
1008
1006
526

FIG. 10

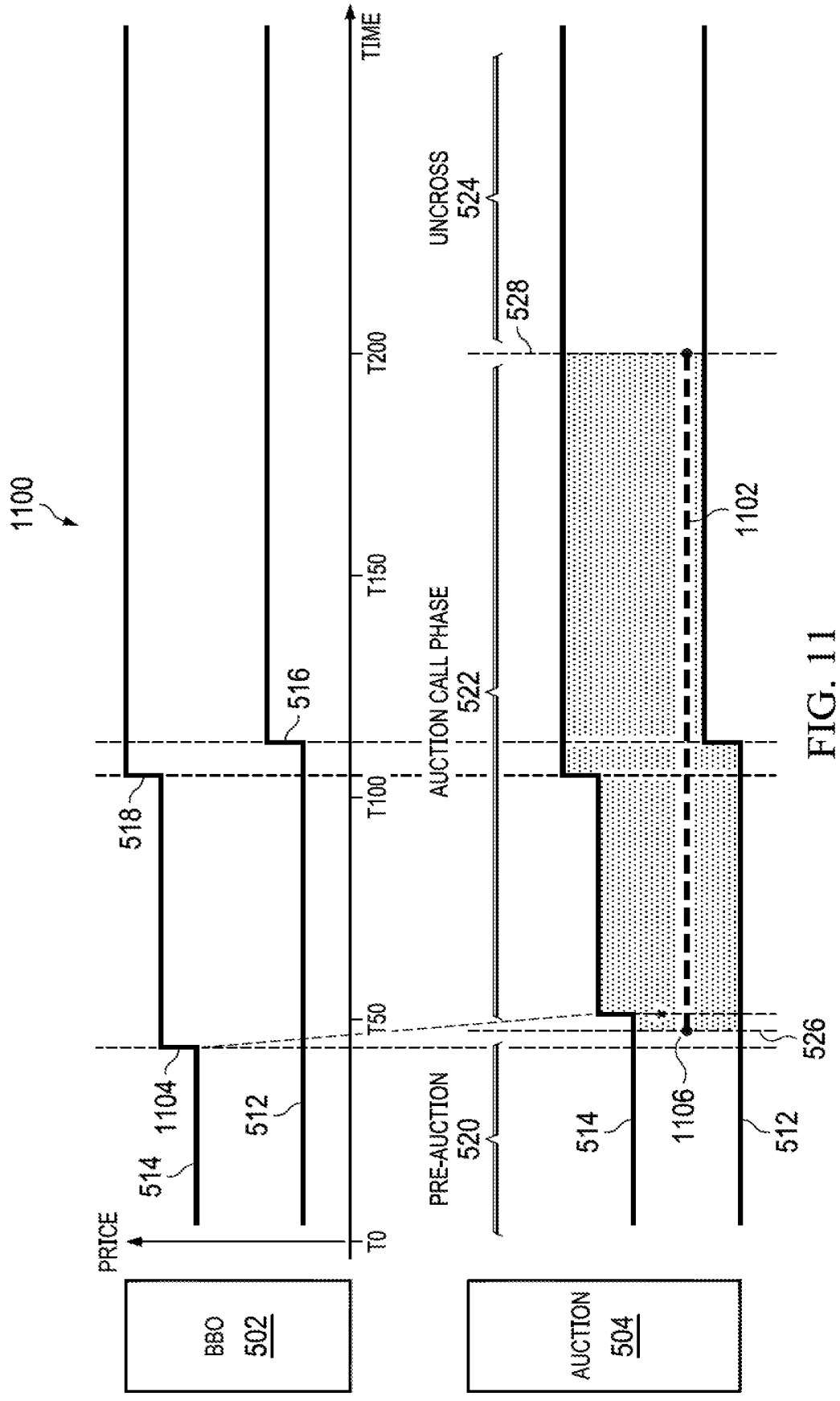

1100
TIME
T200
T150
T100
T50
T0
PRICE
BBO
502
AUCTION
504
PRE-AUCTION
520
AUCTION CALL PHASE
522
UNCROSS
524
528
526
516
518
1104
514
512
1102
1106

FIG. 11

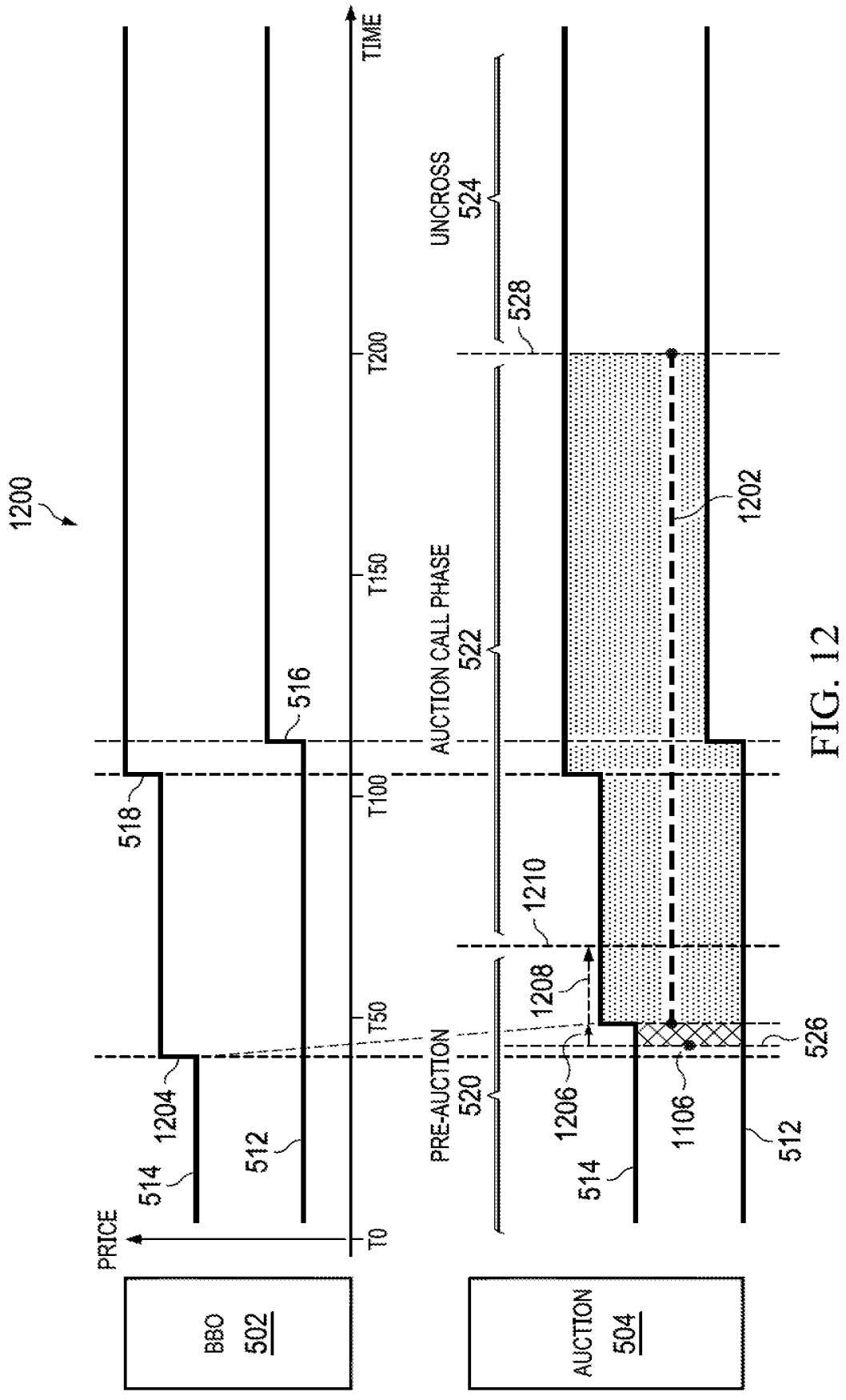

1200
TIME
T200
T150
T100
T50
T0
PRICE
BBO
502
AUCTION
504
PRE-AUCTION
520
AUCTION CALL PHASE
522
UNCROSS
524
514
512
516
518
1204
1206
1208
1210
1106
1202
526
528

FIG. 12

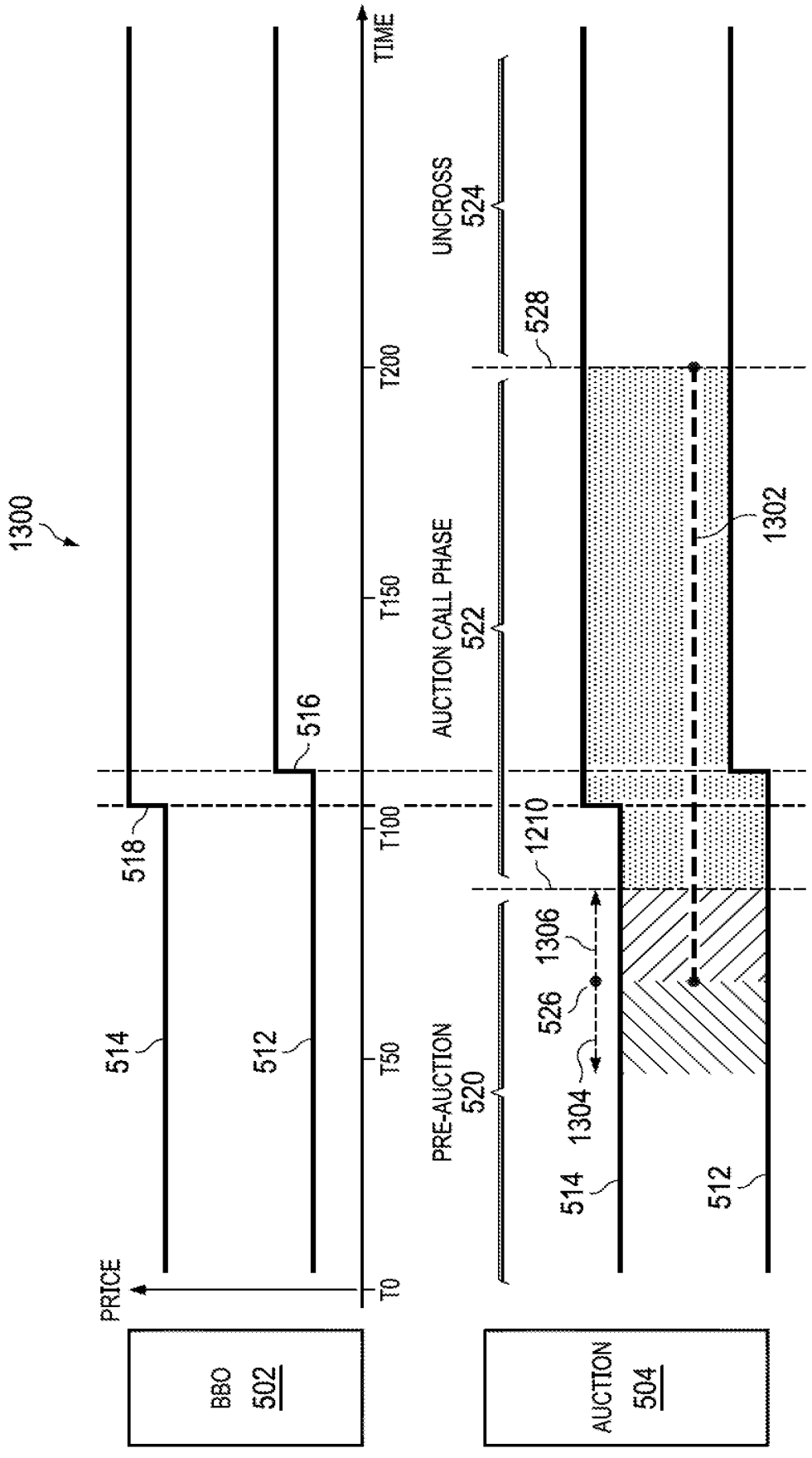

1300
TIME
T200
T150
T100
T50
T0
PRICE
BBO
502
AUCTION
504
PRE-AUCTION
520
AUCTION CALL PHASE
522
UNCROSS
524
528
1302
1210
1306
526
1304
514
512
516
518

FIG. 13