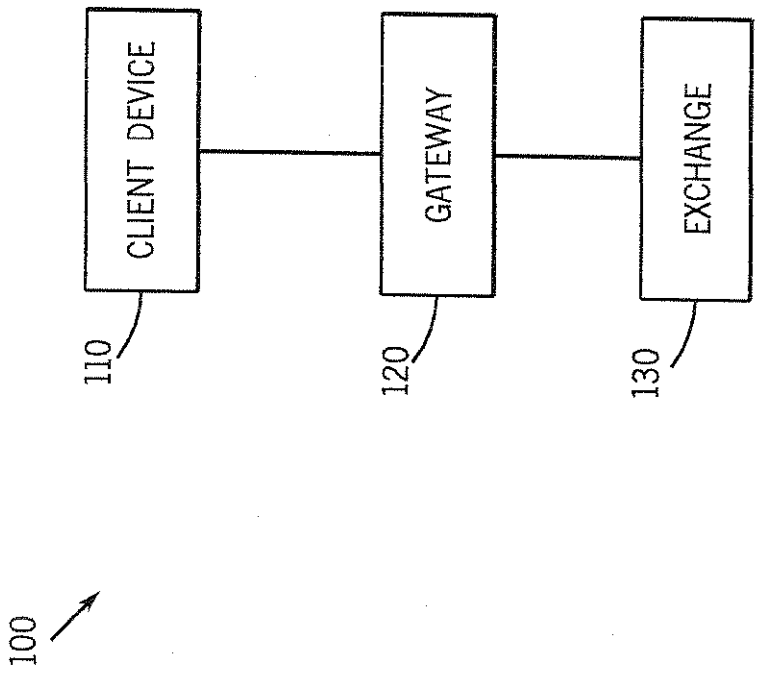


FIG. 1

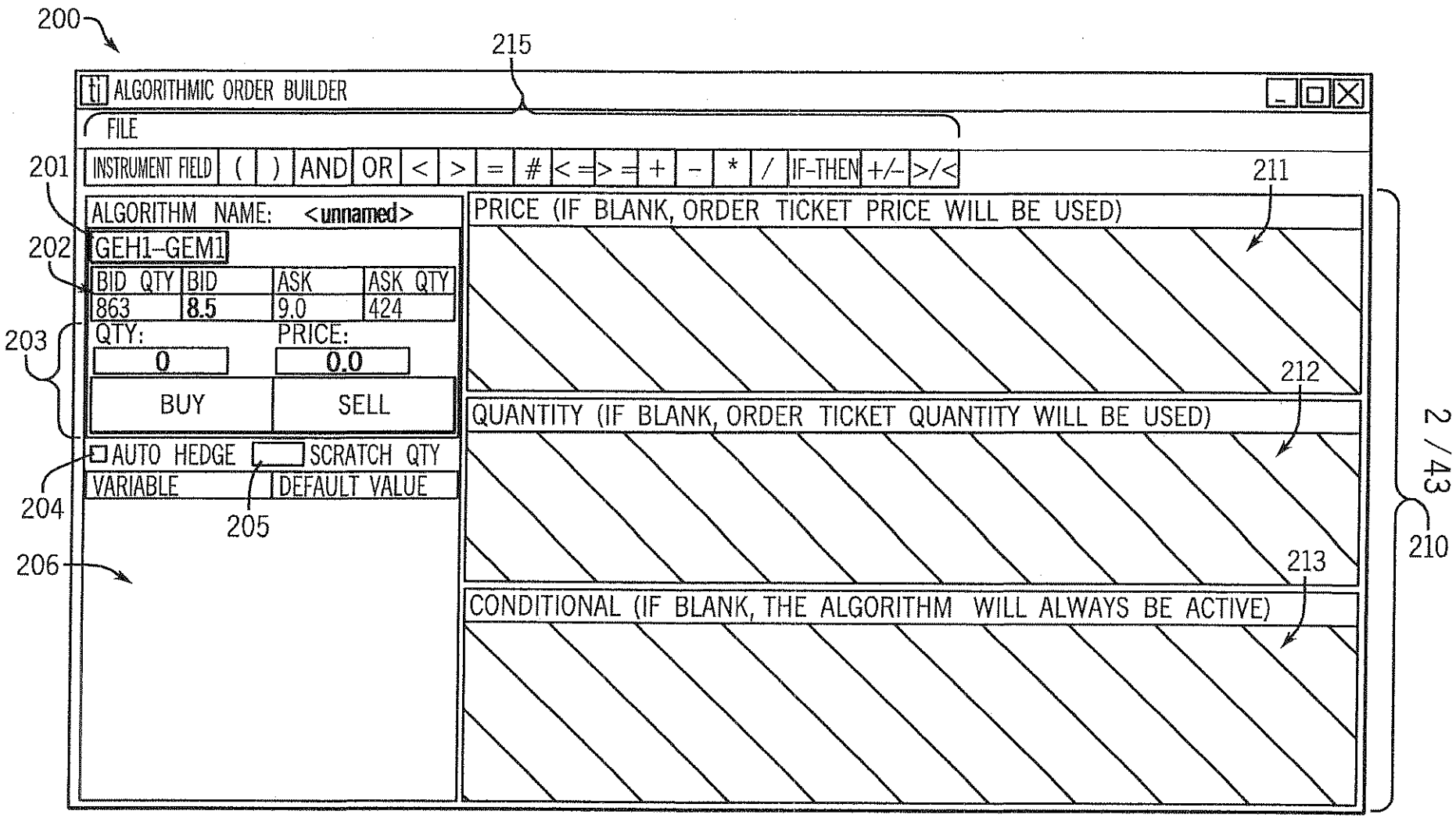

200
215
ALGORITHMIC ORDER BUILDER
FILE
INSTRUMENT FIELD ( ) AND OR < > = # <= >= + - * / IF-THEN +/- >/<
201
211
ALGORITHM NAME: <unnamed>
202
GEH1-GEM1
BID QTY BID ASK ASK QTY
863 8.5 9.0 424
203
QTY: PRICE:
0 0.0
BUY SELL
AUTO HEDGE SCRATCH QTY
204
VARIABLE DEFAULT VALUE
205
206
PRICE (IF BLANK, ORDER TICKET PRICE WILL BE USED)
212
QUANTITY (IF BLANK, ORDER TICKET QUANTITY WILL BE USED)
213
CONDITIONAL (IF BLANK, THE ALGORITHM WILL ALWAYS BE ACTIVE)
210
2 / 43

FIG. 2A

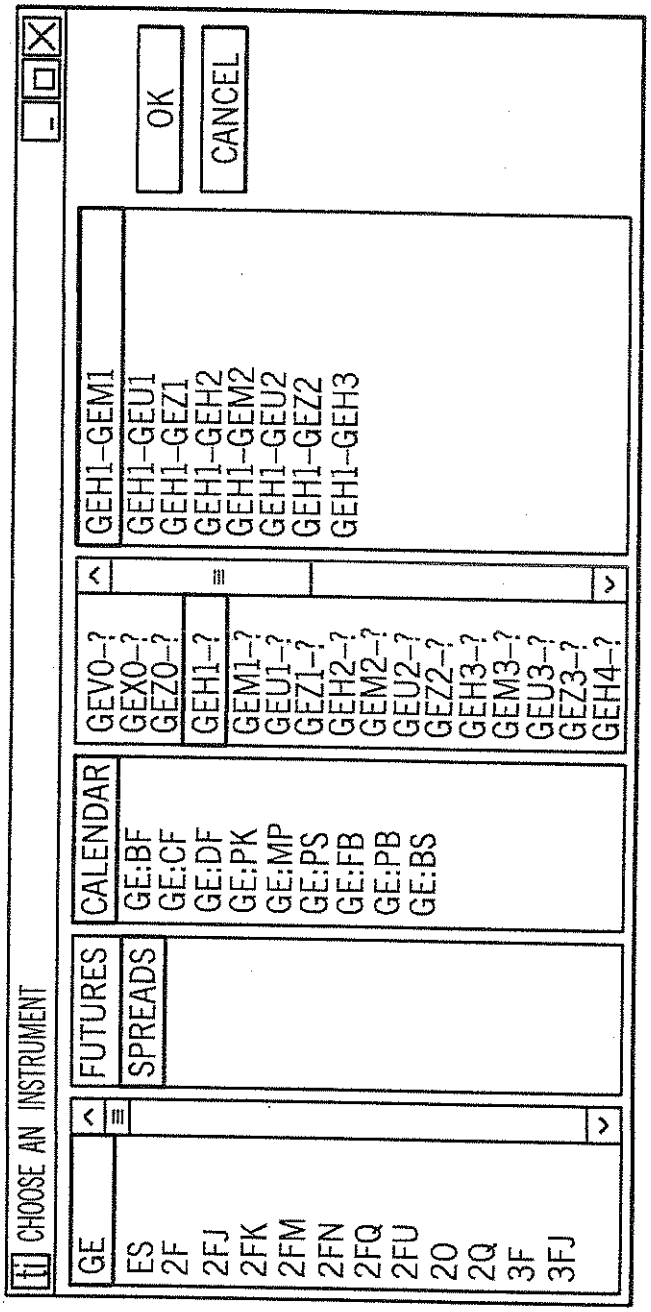

CHOOSE AN INSTRUMENT
GE
ES
2F
2FJ
2FK
2FM
2FN
2FQ
2FU
2O
2Q
3F
3FJ
FUTURES
SPREADS
CALENDAR
GE:BF
GE:CF
GE:DF
GE:PK
GE:MP
GE:PS
GE:FB
GE:PB
GE:BS
GEV0-?
GEX0-?
GEZ0-?
GEH1-?
GEM1-?
GEU1-?
GEZ1-?
GEH2-?
GEM2-?
GEU2-?
GEZ2-?
GEH3-?
GEM3-?
GEU3-?
GEZ3-?
GEH4-?
GEH1-GEM1
GEH1-GEU1
GEH1-GEZ1
GEH1-GEH2
GEH1-GEM2
GEH1-GEU2
GEH1-GEZ2
GEH1-GEH3
OK
CANCEL
220

FIG. 2B

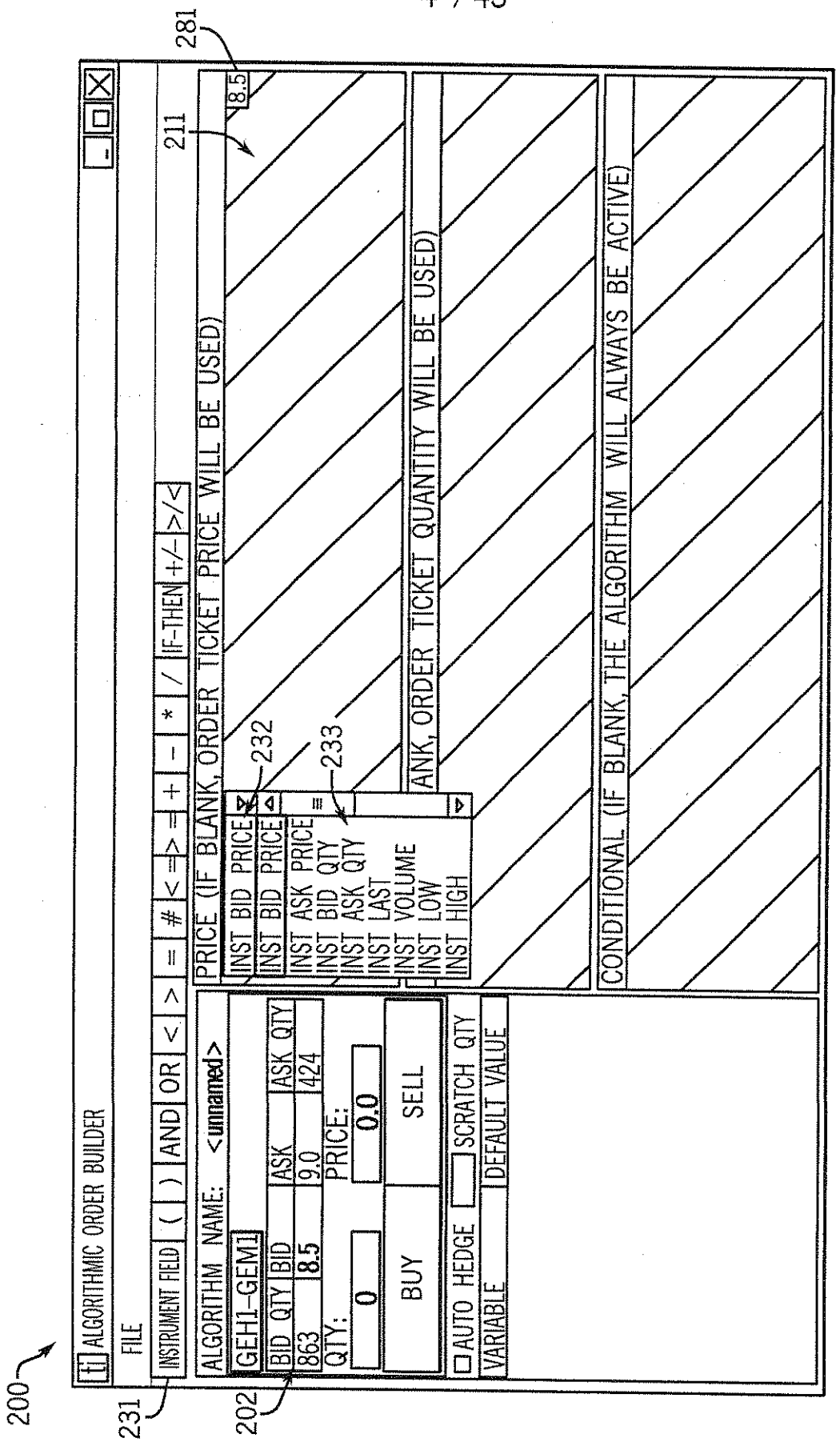

200
231
202
281
211
232
233
ALGORITHMIC ORDER BUILDER
FILE
INSTRUMENT FIELD
( )
AND
OR
< > = # <= >= + - * / IF-THEN +/- >/<
ALGORITHM NAME: <unnamed>
GEH1-GEM1
BID QTY BID
863 8.5
ASK
9.0
ASK QTY
424
QTY:
0
PRICE:
0.0
BUY
SELL
AUTO HEDGE
SCRATCH QTY
VARIABLE
DEFAULT VALUE
PRICE (IF BLANK, ORDER TICKET PRICE WILL BE USED)
8.5
INST BID PRICE
INST BID PRICE
INST ASK PRICE
INST BID QTY
INST ASK QTY
INST LAST
INST VOLUME
INST LOW
INST HIGH
ANK, ORDER TICKET QUANTITY WILL BE USED)
CONDITIONAL (IF BLANK, THE ALGORITHM WILL ALWAYS BE ACTIVE)

FIG. 2C

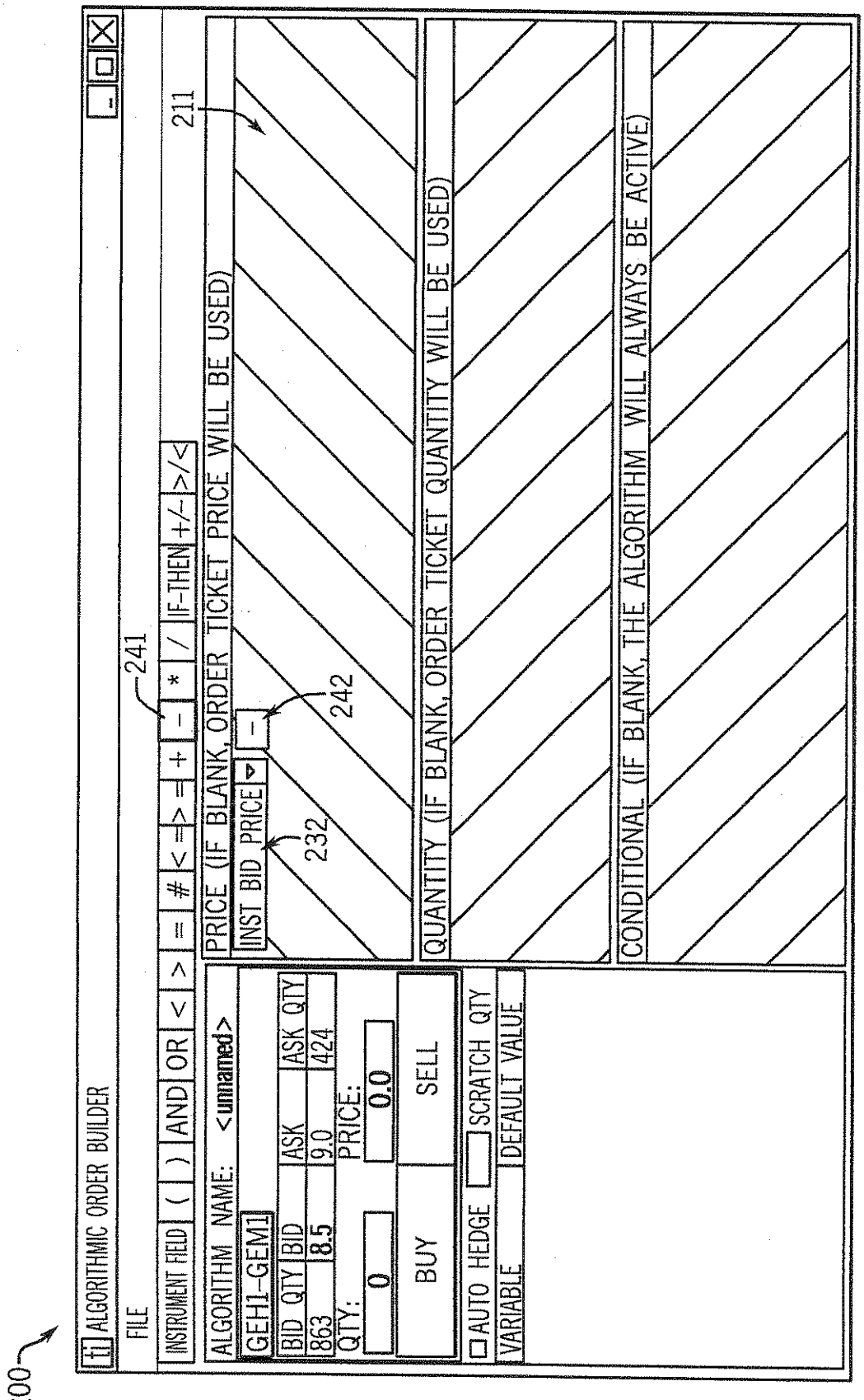

200
ALGORITHMIC ORDER BUILDER
FILE
INSTRUMENT FIELD
( ) AND OR < > = # <= >= + - * / IF-THEN +/- >/<
241
211
ALGORITHM NAME: <unnamed>
GEH1-GEM1
BID QTY BID ASK ASK QTY
863 8.5 9.0 424
QTY: PRICE:
0 0.0
BUY SELL
AUTO HEDGE SCRATCH QTY
VARIABLE DEFAULT VALUE
PRICE (IF BLANK, ORDER TICKET PRICE WILL BE USED)
INST BID PRICE
232
242
QUANTITY (IF BLANK, ORDER TICKET QUANTITY WILL BE USED)
CONDITIONAL (IF BLANK, THE ALGORITHM WILL ALWAYS BE ACTIVE)

FIG. 2D

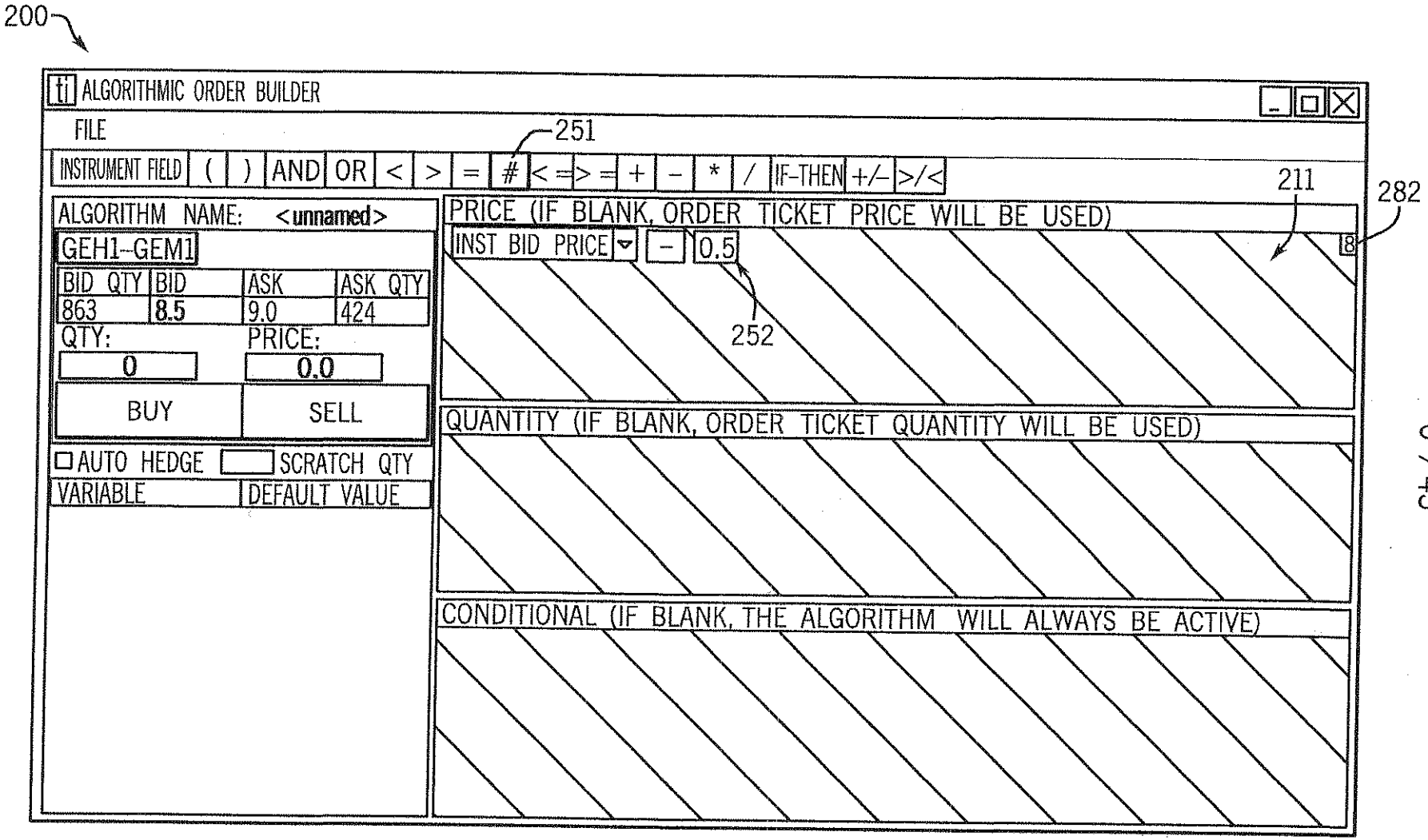

200
ALGORITHMIC ORDER BUILDER
FILE
251
INSTRUMENT FIELD ( ) AND OR < > = # <= >= + - * / IF-THEN +/- >/<
211
282
ALGORITHM NAME: <unnamed>
GEH1-GEM1
BID QTY BID ASK ASK QTY
863 8.5 9.0 424
QTY:
0
PRICE:
0.0
BUY
SELL
AUTO HEDGE
SCRATCH QTY
VARIABLE
DEFAULT VALUE
PRICE (IF BLANK, ORDER TICKET PRICE WILL BE USED)
INST BID PRICE
-
0.5
252
QUANTITY (IF BLANK, ORDER TICKET QUANTITY WILL BE USED)
CONDITIONAL (IF BLANK, THE ALGORITHM WILL ALWAYS BE ACTIVE)

FIG. 2E

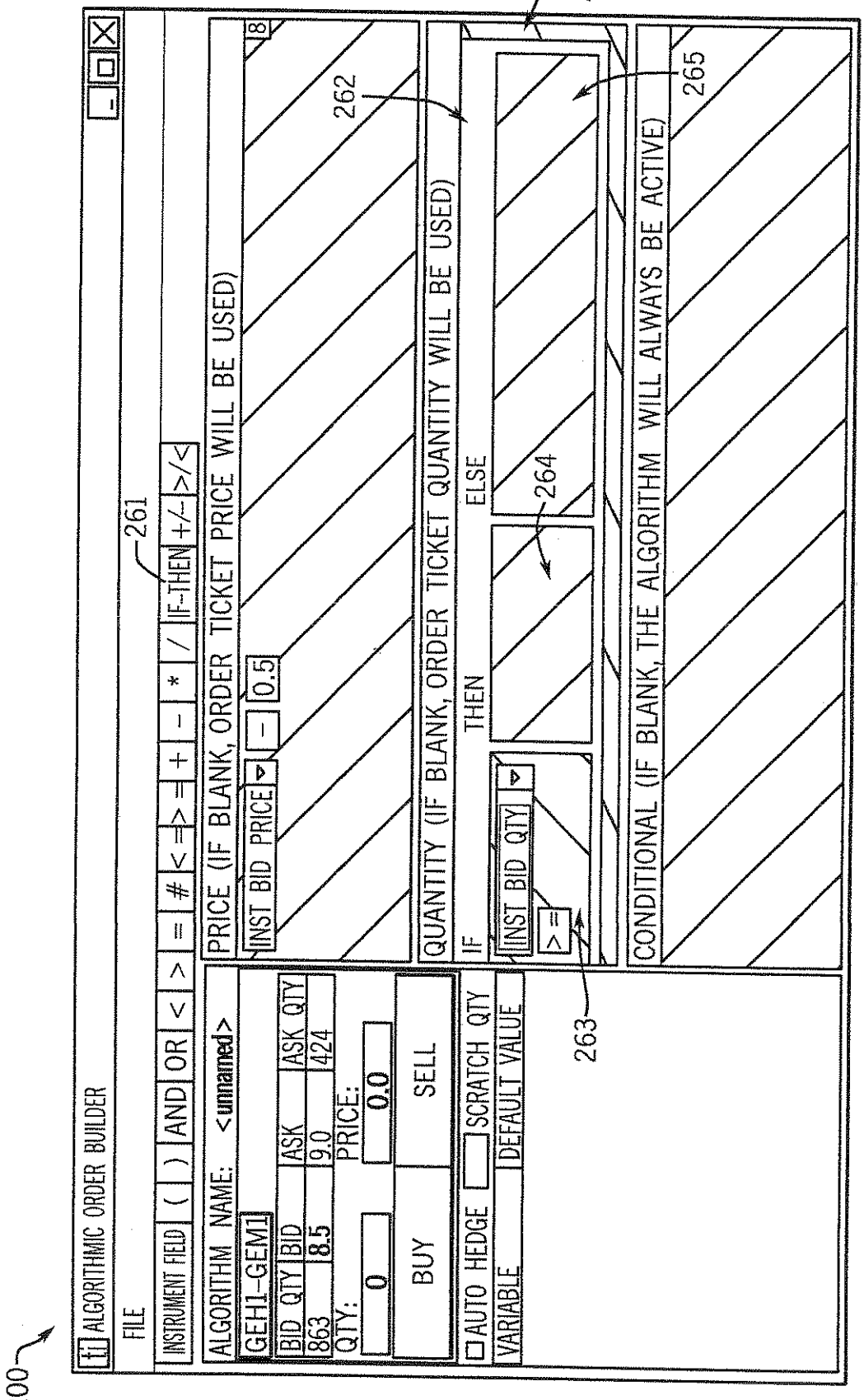

200
ALGORITHMIC ORDER BUILDER
FILE
INSTRUMENT FIELD
( )
AND
OR
<
>
=
#
<=
>=
+
-
*
/
IF-THEN
+/-
>/<
261
ALGORITHM NAME: <unnamed>
GEH1-GEM1
BID QTY
BID
ASK
ASK QTY
863
8.5
9.0
424
QTY:
0
PRICE:
0.0
BUY
SELL
AUTO HEDGE
SCRATCH QTY
VARIABLE
DEFAULT VALUE
PRICE (IF BLANK, ORDER TICKET PRICE WILL BE USED)
INST BID PRICE
-
0.5
18
262
QUANTITY (IF BLANK, ORDER TICKET QUANTITY WILL BE USED)
IF
INST BID QTY
>=
THEN
ELSE
264
263
212
CONDITIONAL (IF BLANK, THE ALGORITHM WILL ALWAYS BE ACTIVE)
265

FIG. 2F

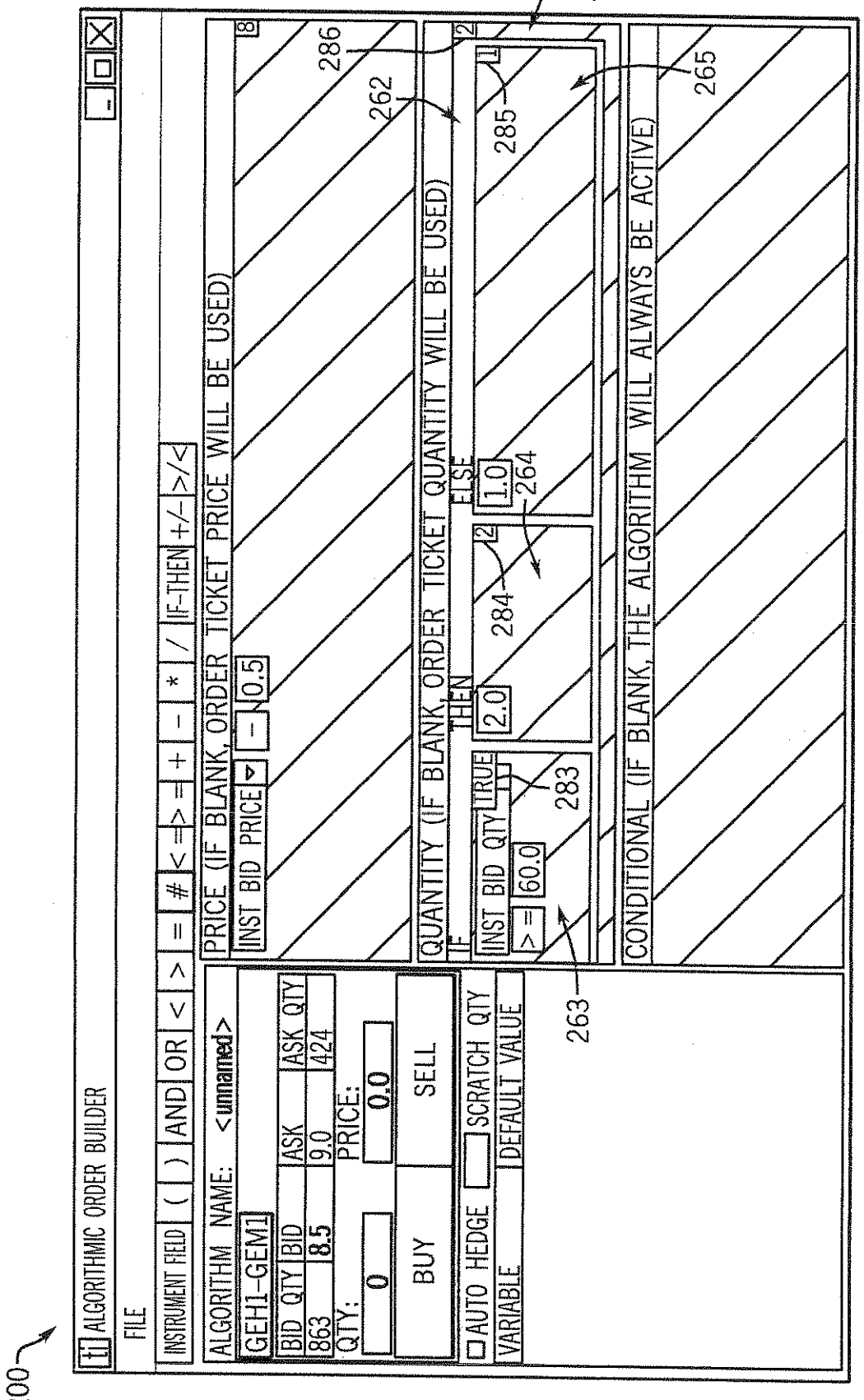

200
ALGORITHMIC ORDER BUILDER
FILE
INSTRUMENT FIELD
( ) AND OR < > = # <= >= + - * / IF-THEN +/- >/<
ALGORITHM NAME: <unnamed>
GEH1-GEM1
BID QTY BID ASK ASK QTY
863 8.5 9.0 424
QTY: 0
PRICE: 0.0
BUY
SELL
AUTO HEDGE SCRATCH QTY
VARIABLE DEFAULT VALUE
PRICE (IF BLANK, ORDER TICKET PRICE WILL BE USED)
INST BID PRICE - 0.5
QUANTITY (IF BLANK, ORDER TICKET QUANTITY WILL BE USED)
IF
INST BID QTY TRUE
>= 60.0
THEN
2.0
ELSE
1.0
CONDITIONAL (IF BLANK, THE ALGORITHM WILL ALWAYS BE ACTIVE)
212
262
263
264
265
283
284
285
286

FIG. 2G

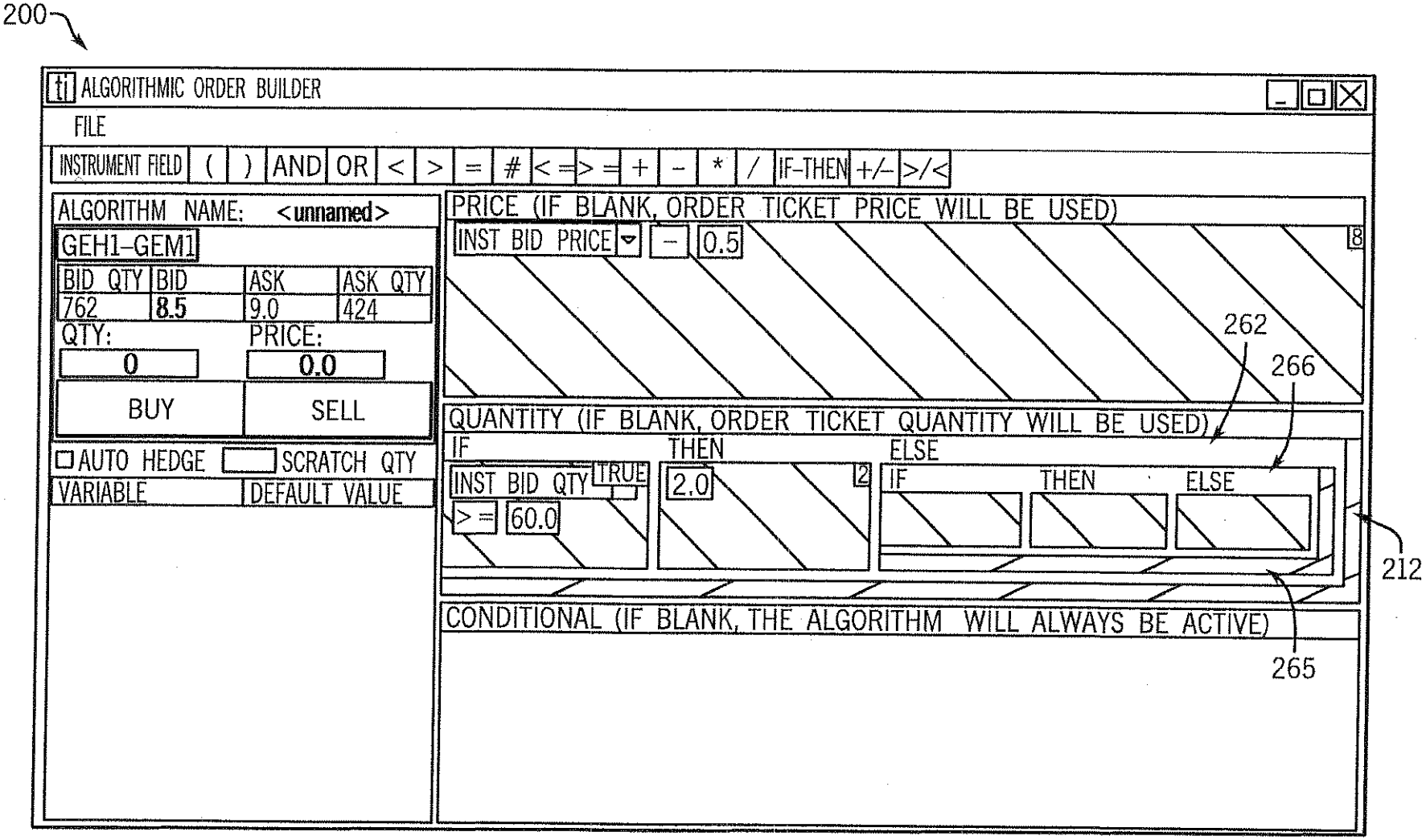

200
ALGORITHMIC ORDER BUILDER
FILE
INSTRUMENT FIELD ( ) AND OR < > = # <= >= + - * / IF-THEN +/- >/<
ALGORITHM NAME: <unnamed>
GEH1-GEM1
BID QTY BID ASK ASK QTY
762 8.5 9.0 424
QTY: PRICE:
0 0.0
BUY SELL
AUTO HEDGE SCRATCH QTY
VARIABLE DEFAULT VALUE
PRICE (IF BLANK, ORDER TICKET PRICE WILL BE USED)
INST BID PRICE - 0.5
QUANTITY (IF BLANK, ORDER TICKET QUANTITY WILL BE USED)
IF THEN ELSE
INST BID QTY TRUE
>= 60.0
2.0
IF THEN ELSE
CONDITIONAL (IF BLANK, THE ALGORITHM WILL ALWAYS BE ACTIVE)
262
266
212
265

FIG. 2H

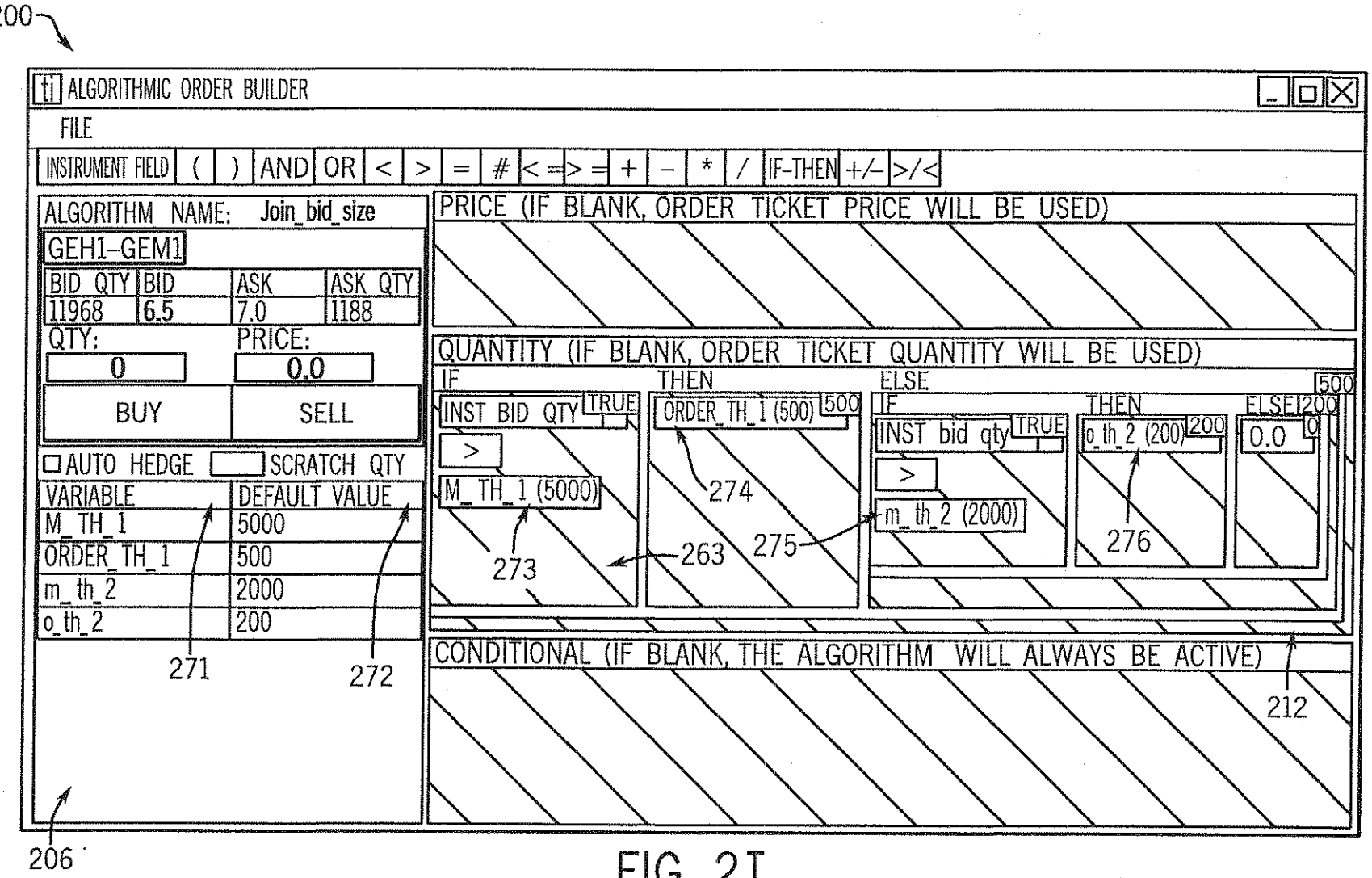

200
ALGORITHMIC ORDER BUILDER
FILE
INSTRUMENT FIELD ( ) AND OR < > = # <= >= + - * / IF-THEN +/- >/<
ALGORITHM NAME: Join_bid_size
GEH1-GEM1
BID QTY BID ASK ASK QTY
11968 6.5 7.0 1188
QTY: PRICE:
0 0.0
BUY SELL
AUTO HEDGE SCRATCH QTY
VARIABLE DEFAULT VALUE
M_TH_1 5000
ORDER_TH_1 500
m_th_2 2000
o_th_2 200
271
272
206
PRICE (IF BLANK, ORDER TICKET PRICE WILL BE USED)
QUANTITY (IF BLANK, ORDER TICKET QUANTITY WILL BE USED)
IF
THEN
ELSE
INST BID QTY TRUE
>
M_TH_1 (5000)
ORDER_TH_1 (500) 500
INST bid qty TRUE
>
m_th_2 (2000)
o_th_2 (200) 200
0.0 0
500
273
274
275
276
263
CONDITIONAL (IF BLANK, THE ALGORITHM WILL ALWAYS BE ACTIVE)
212
262

FIG. 2I

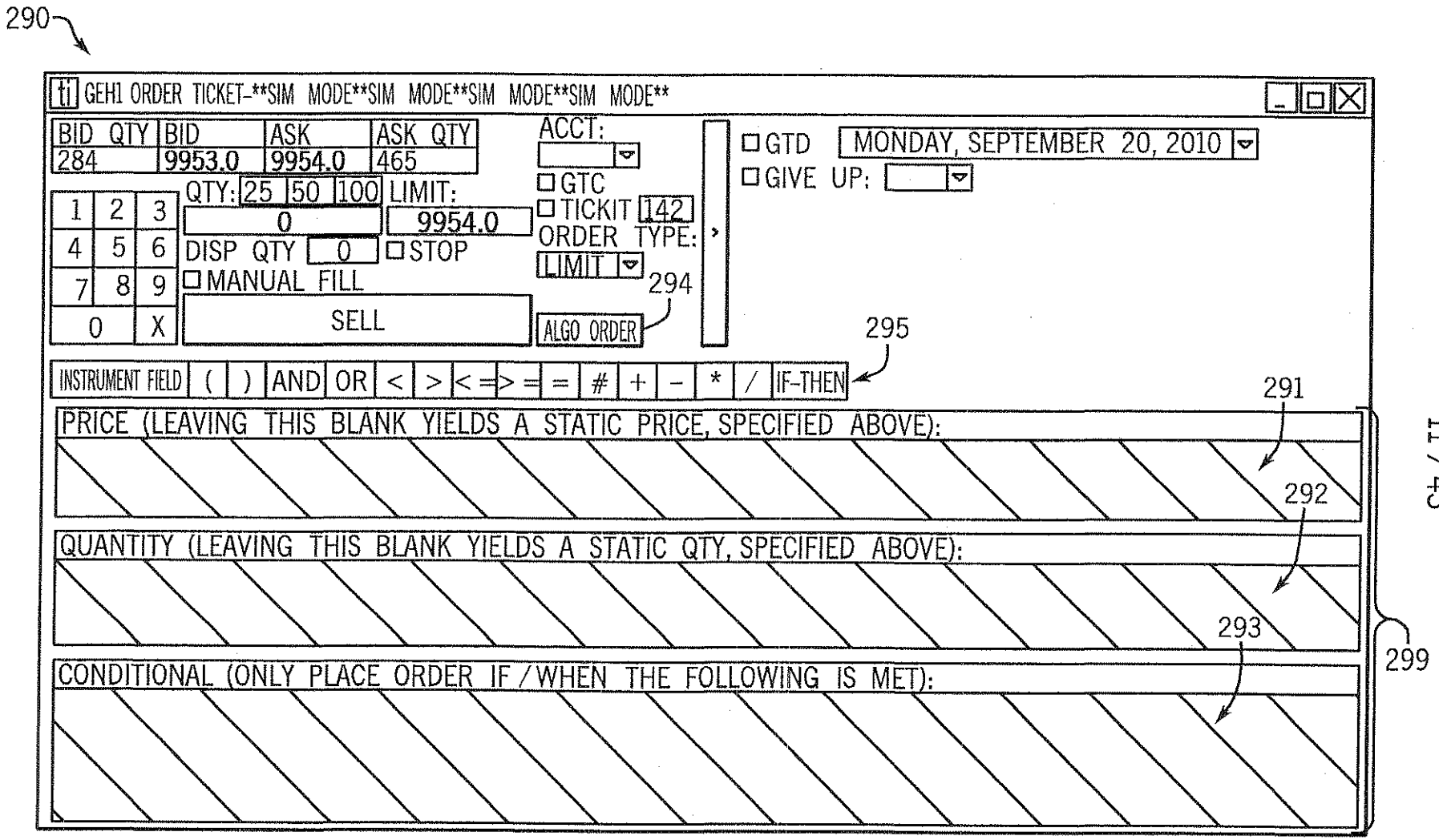

290
GEH1 ORDER TICKET-**SIM MODE**SIM MODE**SIM MODE**SIM MODE**
BID QTY
284
BID
9953.0
ASK
9954.0
ASK QTY
465
ACCT:
GTD
MONDAY, SEPTEMBER 20, 2010
GIVE UP:
GTC
TICKIT 142
QTY: 25 50 100
LIMIT:
0
9954.0
DISP QTY 0
STOP
ORDER TYPE:
LIMIT
MANUAL FILL
294
SELL
ALGO ORDER
1 2 3
4 5 6
7 8 9
0 X
295
INSTRUMENT FIELD ( ) AND OR < > <= >= = # + - * / IF-THEN
291
PRICE (LEAVING THIS BLANK YIELDS A STATIC PRICE, SPECIFIED ABOVE):
292
QUANTITY (LEAVING THIS BLANK YIELDS A STATIC QTY, SPECIFIED ABOVE):
293
CONDITIONAL (ONLY PLACE ORDER IF / WHEN THE FOLLOWING IS MET):
299

FIG. 2J

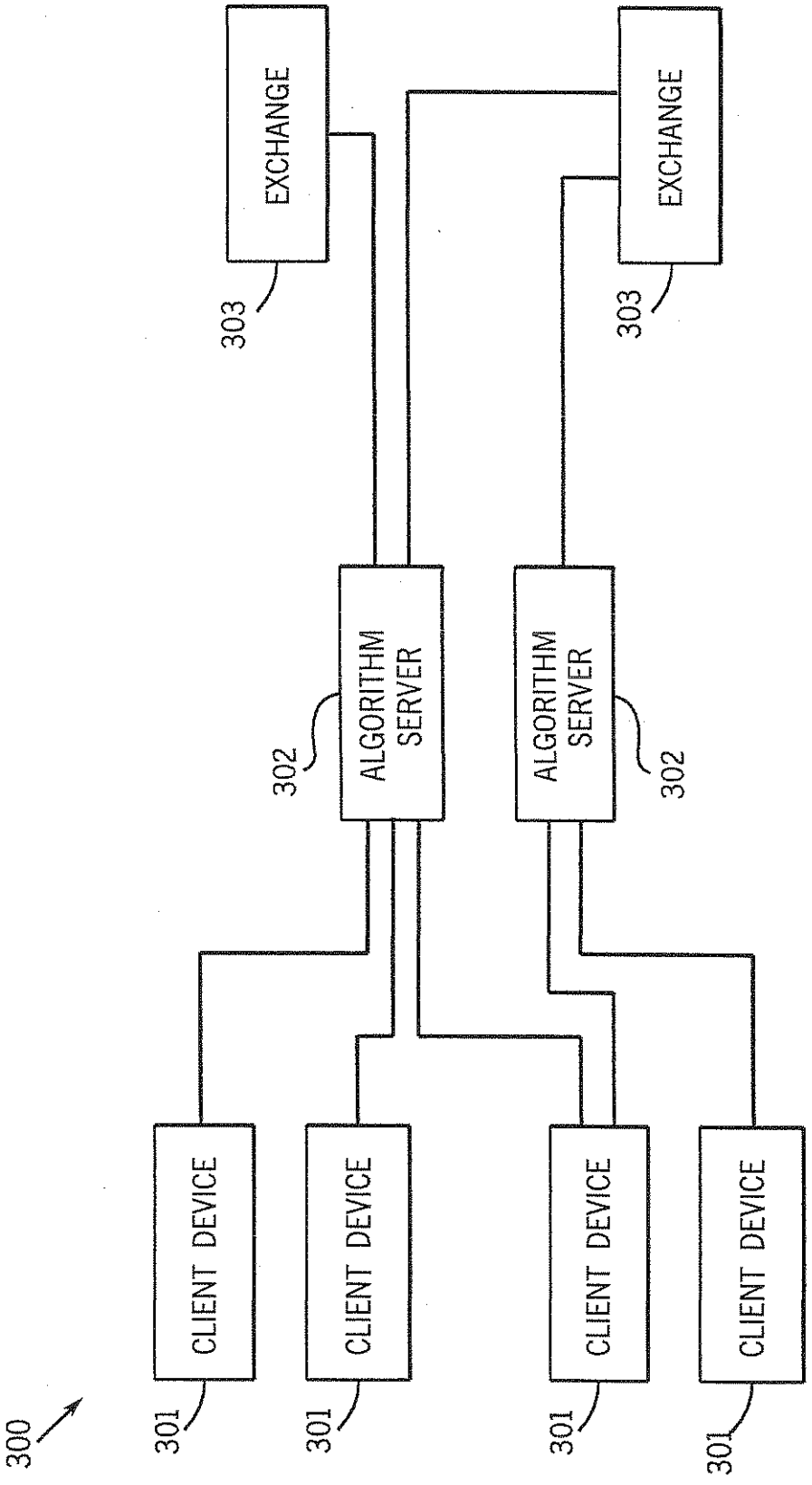

300
CLIENT DEVICE
301
CLIENT DEVICE
301
CLIENT DEVICE
301
CLIENT DEVICE
301
ALGORITHM SERVER
302
ALGORITHM SERVER
302
EXCHANGE
303
EXCHANGE
303

FIG. 3A

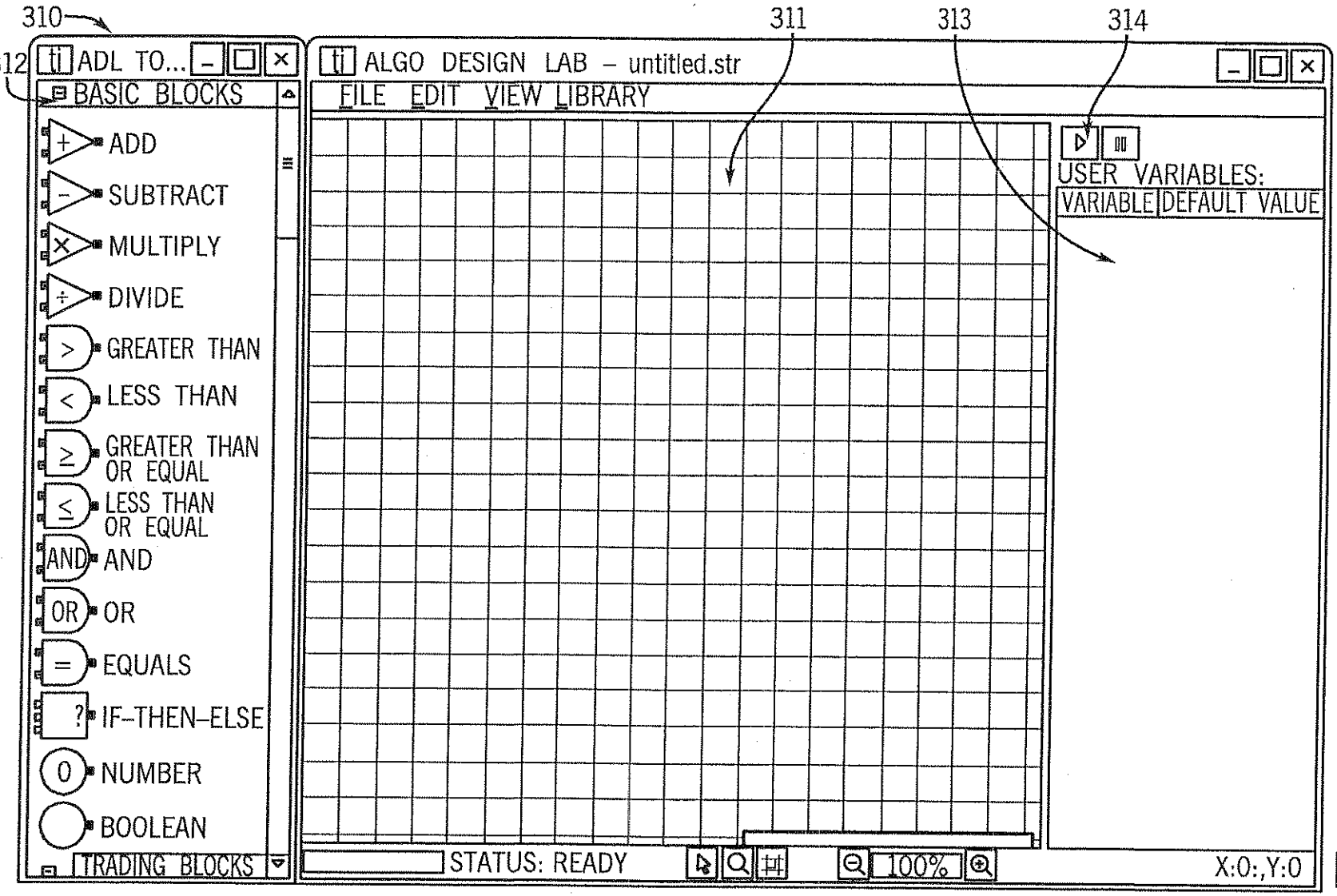

310
311
313
314
312
ADL TO...
BASIC BLOCKS
ADD
SUBTRACT
MULTIPLY
DIVIDE
GREATER THAN
LESS THAN
GREATER THAN OR EQUAL
LESS THAN OR EQUAL
AND
OR
EQUALS
IF–THEN–ELSE
NUMBER
BOOLEAN
TRADING BLOCKS
ALGO DESIGN LAB – untitled.str
FILE EDIT VIEW LIBRARY
USER VARIABLES:
VARIABLE
DEFAULT VALUE
STATUS: READY
100%
X:0:,Y:0

FIG. 3B

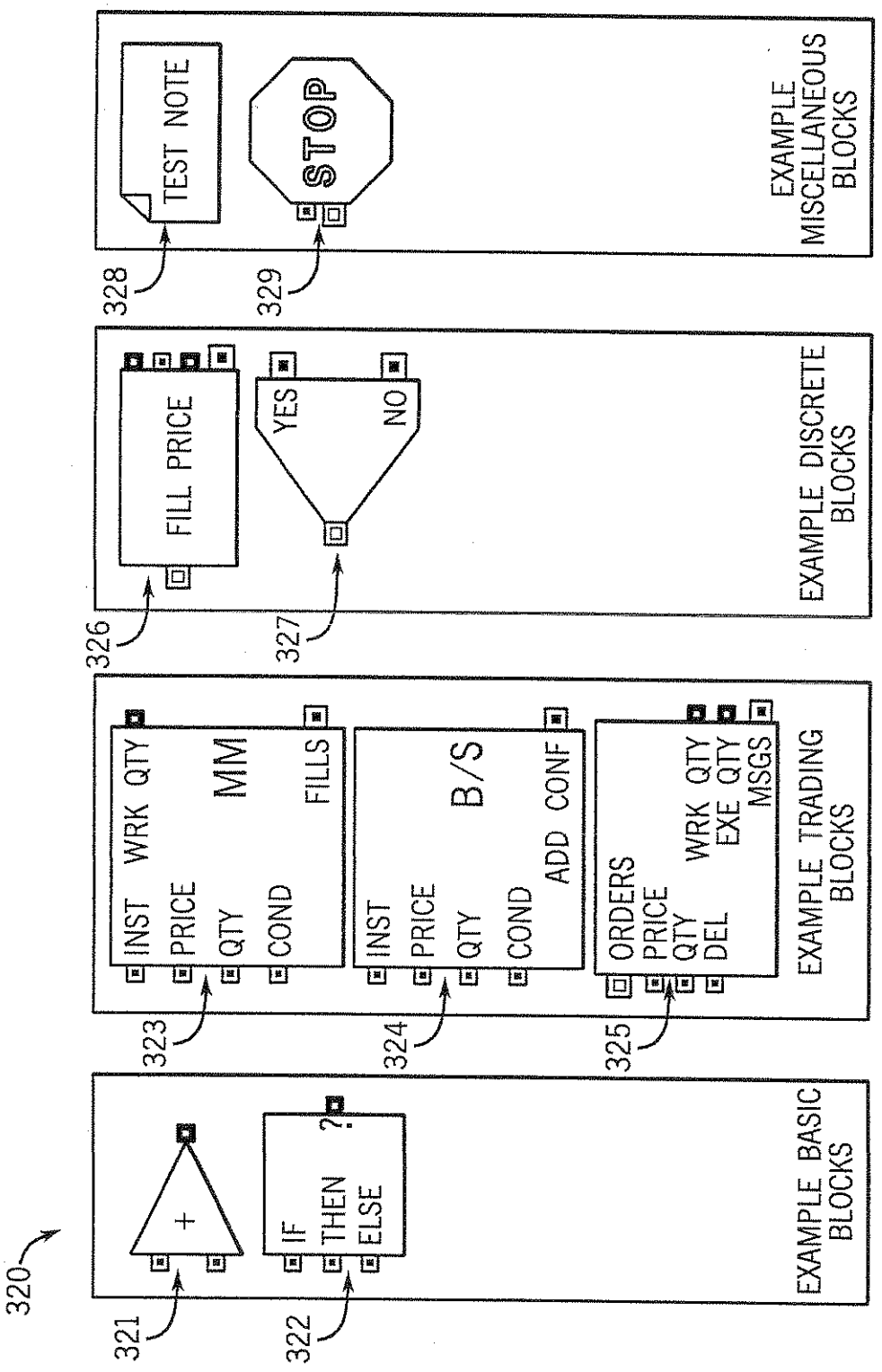

320
EXAMPLE BASIC BLOCKS
+
IF
THEN
ELSE
?
321
322
EXAMPLE TRADING BLOCKS
INST
WRK QTY
PRICE
QTY
COND
MM
FILLS
INST
PRICE
QTY
COND
B/S
ADD CONF
ORDERS
PRICE
QTY
DEL
WRK QTY
EXE QTY
MSGS
323
324
325
EXAMPLE DISCRETE BLOCKS
FILL PRICE
YES
NO
326
327
EXAMPLE MISCELLANEOUS BLOCKS
TEST NOTE
STOP
328
329

FIG. 3C

```
namespace AlgoDesignLab {
    public class CustomAlgorithm0 : Algorithm {

        public Random RandomNumberGenerator = new Random();
        protected CustomAlgorithm0 m_CustomAlgorithm0 = null;

        public CustomAlgorithm0(AlgoController controller, AlgoController user,
                string correlationID, string customer, string traderID,
                string _inOrderTicketDescription, double _inOrderTicketLimit,
                double _inOrderTicketQty) :
                        base(controller, user, correlationID, customer, traderID) {

            m_AlgoName = "Test Algo";
            m_Virtual = true;
            m_CustomAlgorithm0 = this;
            Initialize();
        }

        public void Initialize() {}

        protected override void SetAllVariables() {}

        public override void HandleUpdate(object update) {}

    }
}
```

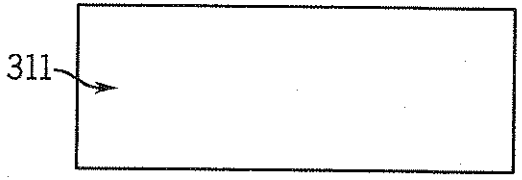
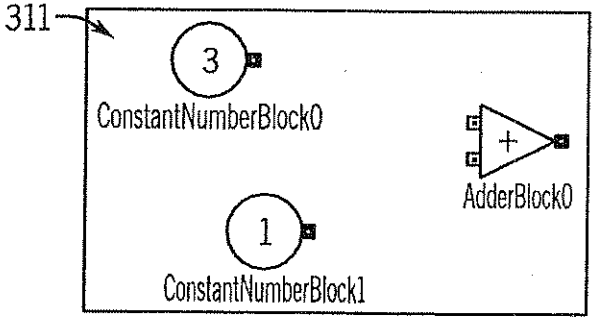


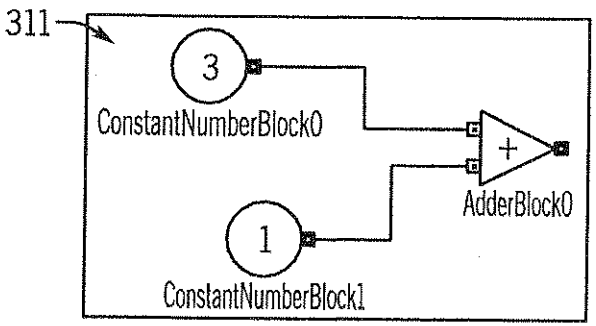
FIG. 3D-1




```
namespace AlgoDesignLab {
    public class CustomAlgorithm0 : Algorithm {
        public double ConstantNumberBlock0 = 3;
        public double ConstantNumberBlock1 = 1;
        public double AdderBlock0 = 0;

        protected override void SetAllVariables() {
            m_ CustomAlgorithm0.AdderBlock0 = 0;
            m_ CustomAlgorithm0.SendUpdate("523e4061-71a0-4eca-b450-1df542cbb20f", 2,
                                           m_ CusomAlgorithm0.AdderBlock0);
        }
    }
}
```

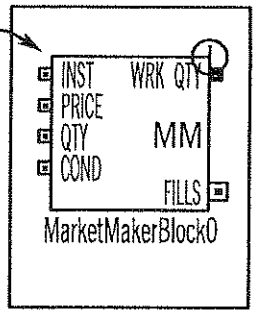
FIG. 3D-2




```
namespace AlgoDesignLab {
    public class CustomAlgorithm0 : Algorithm {
        public double ConstantNumberBlock0 = 3;
        public double ConstantNumberBlock1 = 1;
        public double AdderBlock0 = 0;

        protected override void SetAllVariables() {
            m_CustomAlgorithm0.AdderBlock0 = (m_CustomAlgorithm0.ConstantNumberBlock0 +
                                              m_CustomAlgorithm0.ConstantNumberBlock1);
            m_CustomAlgorithm0.SendUpdate("523e4061-71a0-4eca-b450-1df542cbb20f", 2,
                                          m_CustomAlgorithm0.AdderBlock0);
        }
    }
}
```

FIG. 3D-3

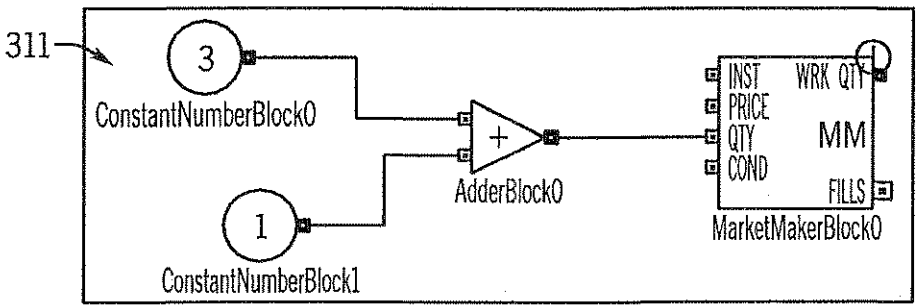



```
namespace AlgoDesignLab {
    public class CustomAlgorithm0 : Algorithm {
        public CustomMarketMaker0 MarketMakerBlock0 = null;

        public CustomAlgorithm0(...) : base(...) {
            MarketMakerBlock0 = new CustomMarketMaker0(m_CusomAlgorithm0, this, true);
            AddRunnableBlock(MarketMakerBlock0, "daf9f34c-d996-4e5f-9bb2-61f30d949b77");
        }

        public class CustomMarketMaker0 : MarketMaker {
            protected CustomAlgorithm0 m_CustomAlgorithm0 = null;
            public CustomMarketMaker0(CustomAlgorithm0 inCustomAlgorithm0,
                                      Algorithm localAlgo, bool buy) :
                                          base(inCustomAlgorithm0, localAlgo, buy) {
                m_CustomAlgorithm0 = inCustomAlgorithm0;
                m_UniqueID = "daf9f34c-d996-4e5f-9bb2-61f30d949b77";
                m_ConnecterIndex = 0;
                m_Flag = "";
            }
            public override InstrumentSnapshot GetInstrument() { return null; }
            public override double GetLimit() { return 0; }
            public override double GetQty() { return 0; }
            public override bool GetConditional() { return true; }
        }
    }
}
```

FIG. 3D-4

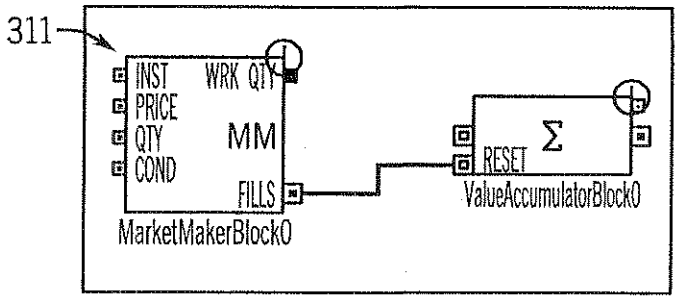



```
namespace AlgoDesignLab {
    public class CustomAlgorithm0 : Algorithm {
        public double ConstantNumberBlock0 = 3;
        public double ConstantNumberBlock1 = 1;
        public double AdderBlock0 = 0;
        public CustomMarketMaker0 MarketMakerBlock0 = null;

        protected override void SetAllVariables() {
            m_CustomAlgorithm0.AdderBlock0 = (m_CustomAlgorithm0.ConstantNumberblock0 +
                                              m_CustomAlgorithm0.ConstantNumberBlock1);
            m_CustomAlgorithm0.SendUpdate("523e4061-71a0-4eca-b450-1df542cbb20f", 2,
                                              m_CustomAlgorithm0.AdderBlock0);
        }

        public class CustomMarketMaker0 : MarketMaker {
            public override double GetQty() {
                return (int)m_CustomAlgorithm0.AdderBlock0;
            }
        }
    }
}
```

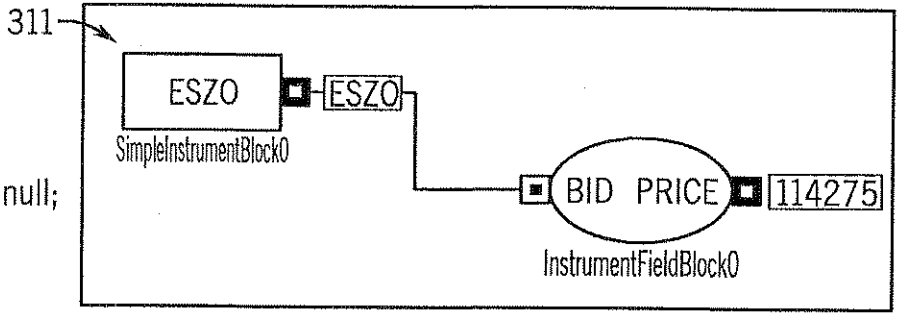
FIG. 3D-5




```
namespace AlgoDesignLab {
    public class CustomAlgorithm0 : Algorithm {
        public CustomMarketMaker0 MarketMakerBlock0 = null;
        public CustomValueAccumulator0 ValueAccumulatorBlock0 = null;

        public CustomAlgorithm0(...) : base(...) {
            m_AlgoName = "Test Algo";
            m_Virtual = true;
            m_CustomAlgorithm0 = this;
            MarketMakerBlock0 = new CustomMarketMaker0(m_CustomAlgorithm0, this, true);
            AddRunnableBlock(MarketMakerBlock0, "760f69d4-630a-453f-b9e8-0e58de8a7945");
            ValueAccumulatorBlock0 = new CustomValueAccumulator0(m_CustomAlgorithm0, this);
            Initialize();
        }
        public void Initialize() {
            MarketMakerBlock0.DiscreteObjectGenerated +=
                    m_CustomAlgorithm0.InterceptOrderMessage;
            MarketMakerBlock0.DiscreteObjectGenerated +=
                    m_CustomAlgorithm0.ValueAccumulatorBlock0.ProcessResetMessage;
        }
    }
}
```

FIG. 3D-6




```
namespace AlgoDesignLab {
    public class CustomAlgorithm0 : Algorithm {
        public InstrumentSnapshot SimpleInstrumentBlock0 = null;
        public double InstrumentFieldBlock0 = 0;

        public CustomAlgorithm0(...) : base(...) {
            SimpleInstrumentBlock0 = m_CustomAlgorithm0.AddInstrumentListener(this, "ESZO");
            Initialize();
        }
        protected override void SetAllVariables() {
            m_CustomAlgorithm0.SimpleInstrumentBlock0 =
                                    m_CustomAlgorithm0.LookupInstrument("ESZO");
            m_CustomAlgorithm0.InstrumentFieldBlock0 =
                    (m_CustomAlgorithm0.SimpleInstrumentBlock0 != null ?
                                m_CustomAlgorithm0.SimpleInstrumentBlock0.Bid : 0);
        }
        public override void HandleUpdate(object update) {
            if (m_CustomAlgorithm0.SimpleInstrumentBlock0 == update) {
                m_CustomAlgorithm0.InstrumentFieldBlock0 =
                    (m_CustomAlgorithm0.SimpleInstrumentBlock0 != null ?
                        m_CustomAlgorithm0.SimpleInstrumentBlock0.Bid : 0);
            }
        }
    }
}
```

FIG. 3D-7

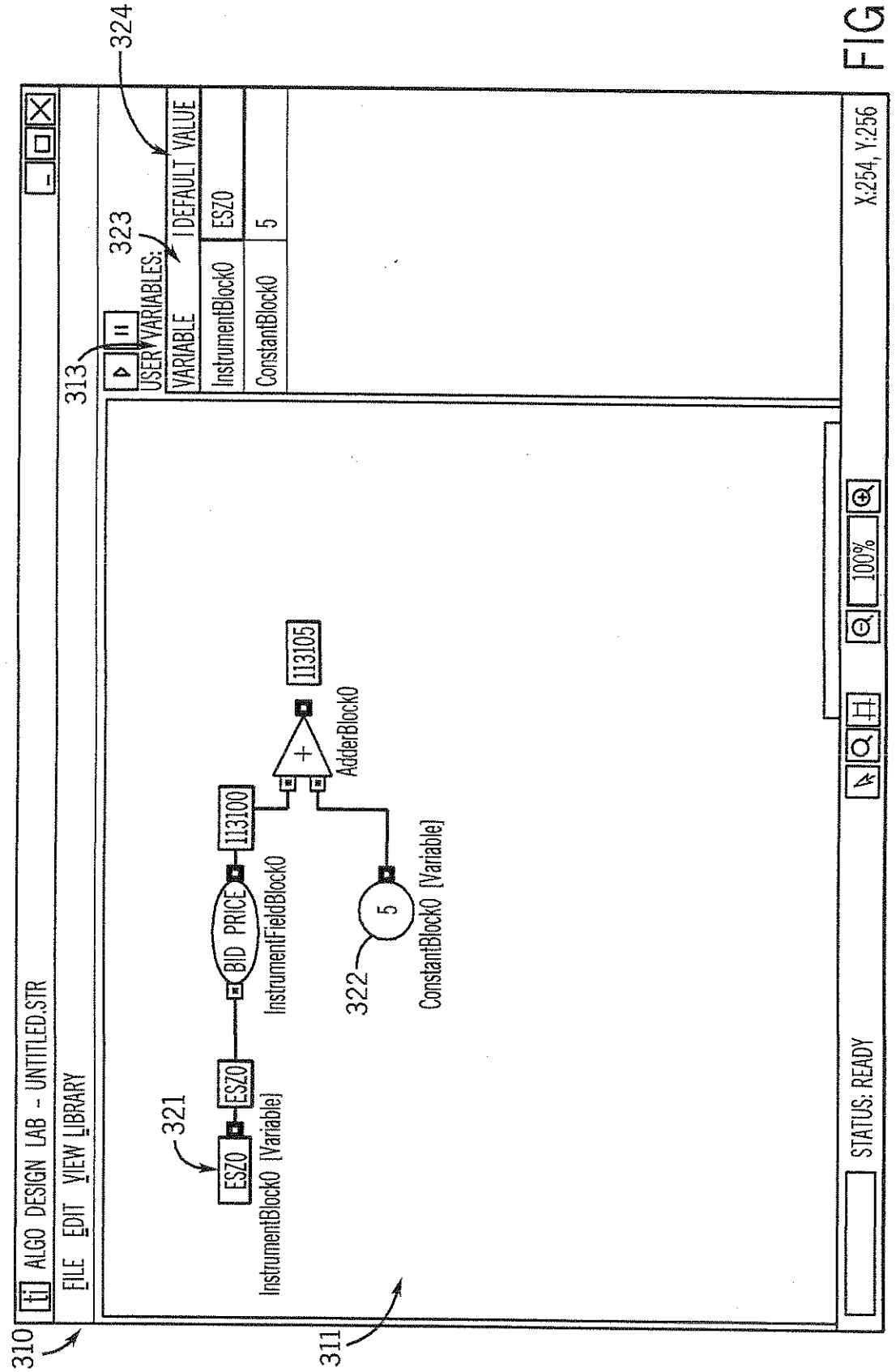

310
ALGO DESIGN LAB - UNTITLED.STR
FILE EDIT VIEW LIBRARY
311
313
323
324
USER VARIABLES:
VARIABLE
DEFAULT VALUE
InstrumentBlock0
ESZ0
ConstantBlock0
5
321
ESZ0
ESZ0
InstrumentBlock0 [Variable]
BID PRICE
InstrumentFieldBlock0
113100
113105
AdderBlock0
322
5
ConstantBlock0 [Variable]
STATUS: READY
100%
X:254, Y:256

FIG. 3E

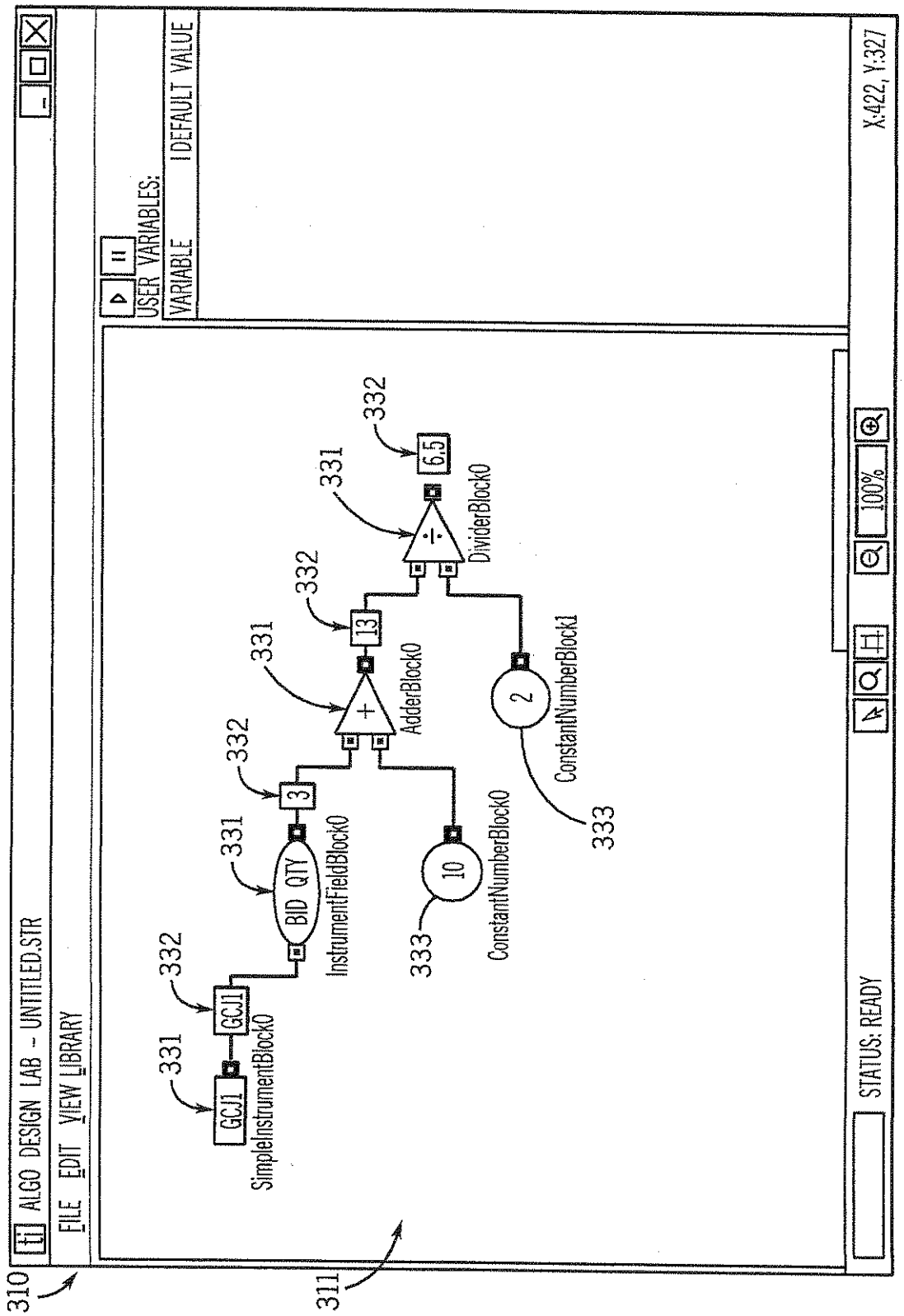

ALGO DESIGN LAB - UNTITLED.STR
FILE EDIT VIEW LIBRARY
USER VARIABLES:
VARIABLE
DEFAULT VALUE
STATUS: READY
100%
X:422, Y:327
GCJ1
SimpleInstrumentBlock0
BID QTY
InstrumentFieldBlock0
AdderBlock0
DividerBlock0
ConstantNumberBlock0
ConstantNumberBlock1
3
13
6.5
10
2
310
311
331
332
333

FIG. 3F

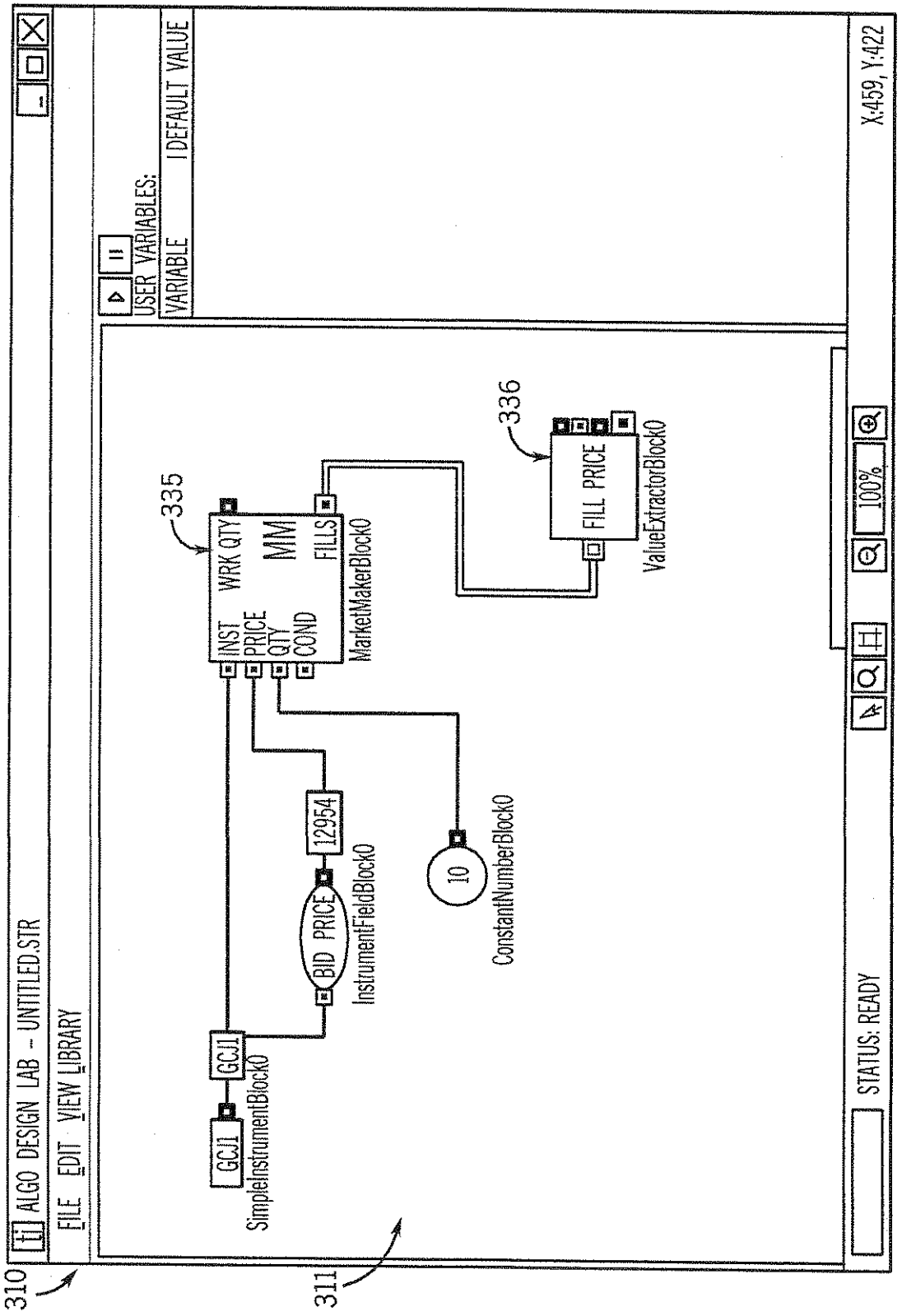

ALGO DESIGN LAB – UNTITLED.STR
FILE EDIT VIEW LIBRARY
USER VARIABLES:
VARIABLE
DEFAULT VALUE
STATUS: READY
X:459, Y:422
100%
310
311
335
336
INST
PRICE
QTY
COND
WRK QTY
MM
FILLS
MarketMakerBlock0
FILL PRICE
ValueExtractorBlock0
GCJ1
GCJ1
SimpleInstrumentBlock0
BID PRICE
12954
InstrumentFieldBlock0
10
ConstantNumberBlock0

FIG. 3G

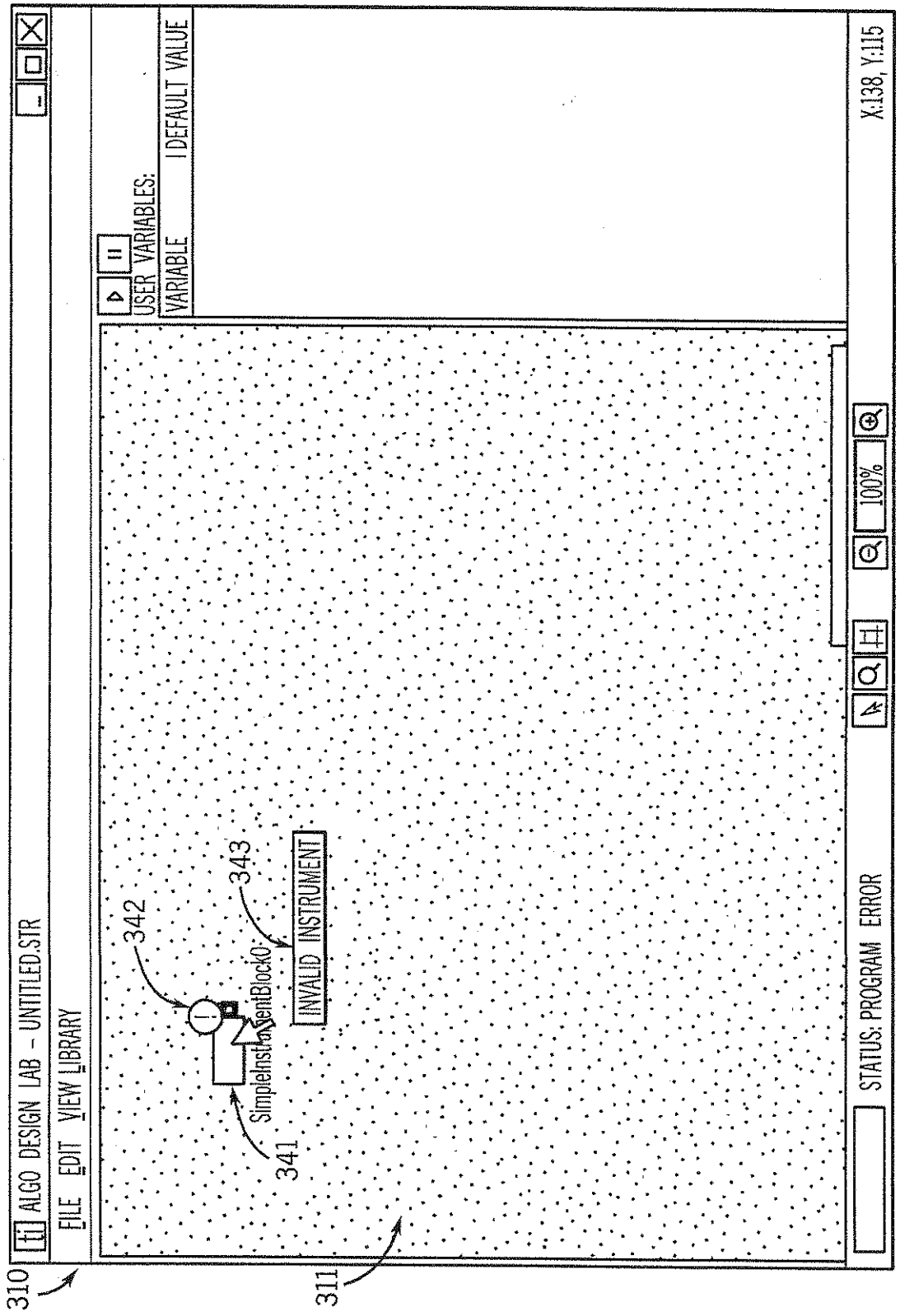

310
ALGO DESIGN LAB – UNTITLED.STR
FILE EDIT VIEW LIBRARY
USER VARIABLES:
VARIABLE
DEFAULT VALUE
342
343
SimpleInstrumentBlock0
INVALID INSTRUMENT
341
311
STATUS: PROGRAM ERROR
100%
X:138, Y:115

FIG. 3H

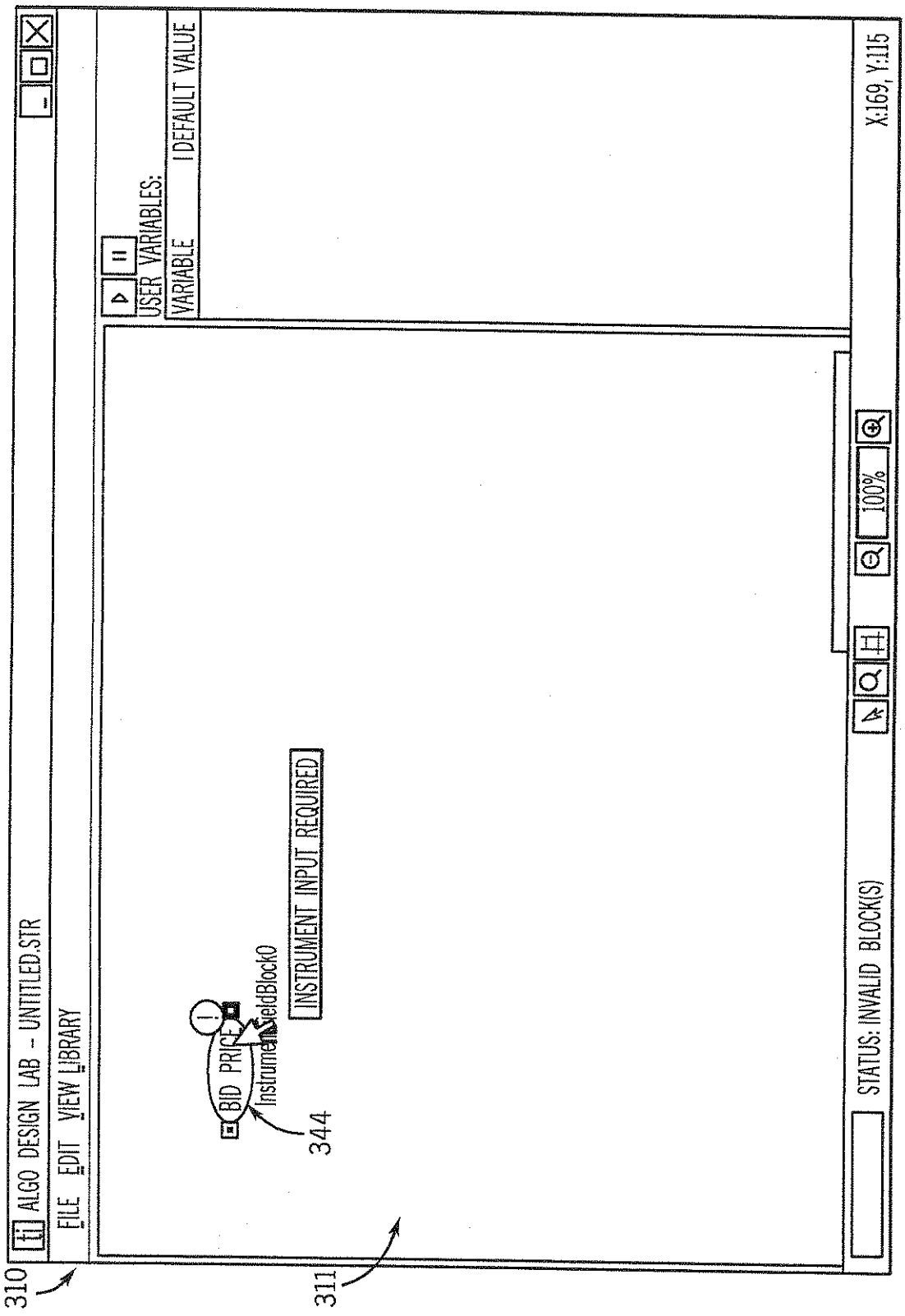

ALGO DESIGN LAB – UNTITLED.STR
FILE EDIT VIEW LIBRARY
USER VARIABLES:
VARIABLE
DEFAULT VALUE
BID PRICE
INSTRUMENT INPUT REQUIRED
100%
STATUS: INVALID BLOCK(S)
X:169, Y:115
310
311
344

FIG. 3I

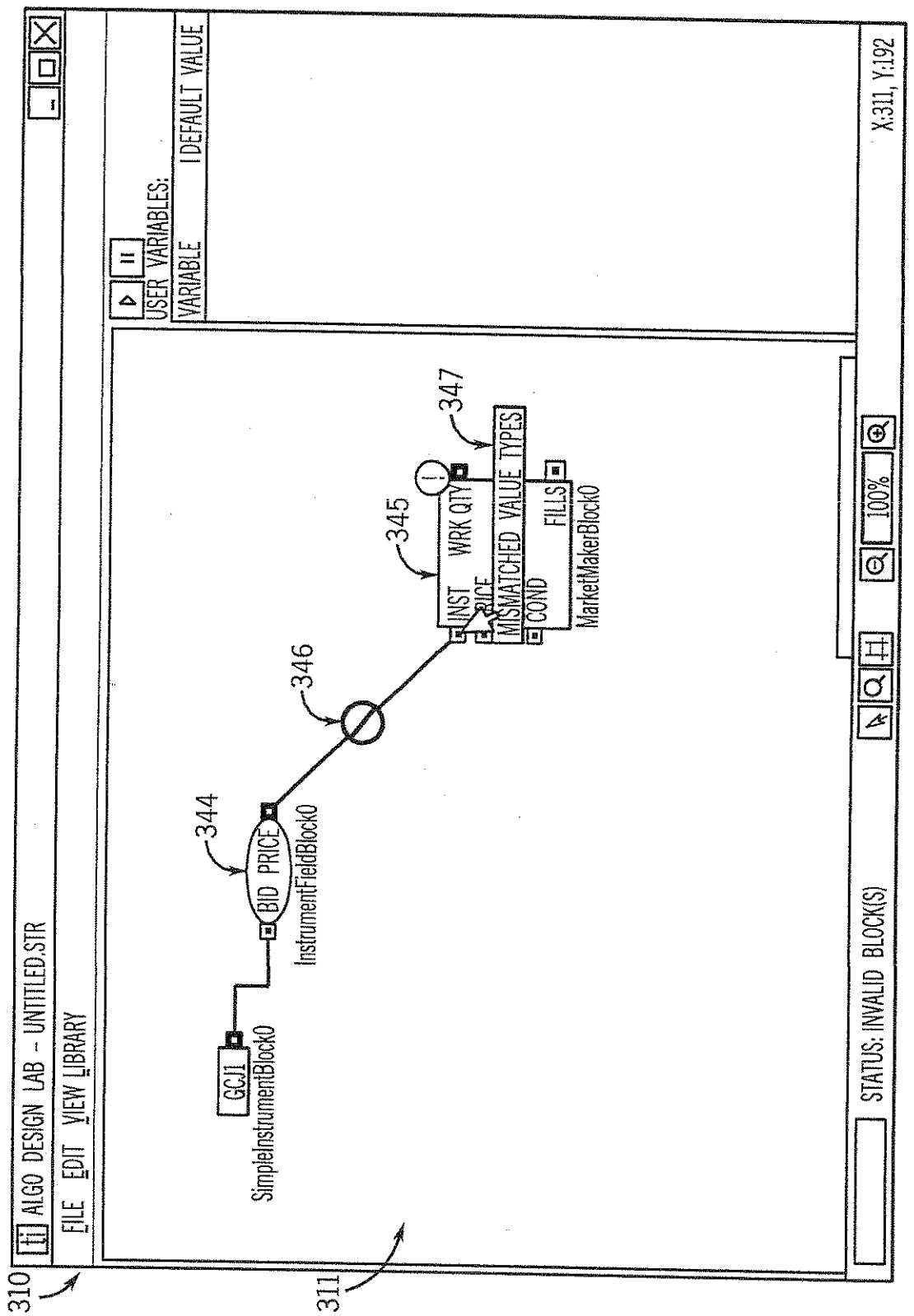

ALGO DESIGN LAB – UNTITLED.STR
FILE EDIT VIEW LIBRARY
USER VARIABLES:
VARIABLE
DEFAULT VALUE
GCJ1
SimpleInstrumentBlock0
BID PRICE
InstrumentFieldBlock0
INST
PRICE
WRK QTY
MISMATCHED VALUE TYPES
COND
FILLS
MarketMakerBlock0
344
345
346
347
310
311
STATUS: INVALID BLOCK(S)
100%
X:311, Y:192

FIG. 3J

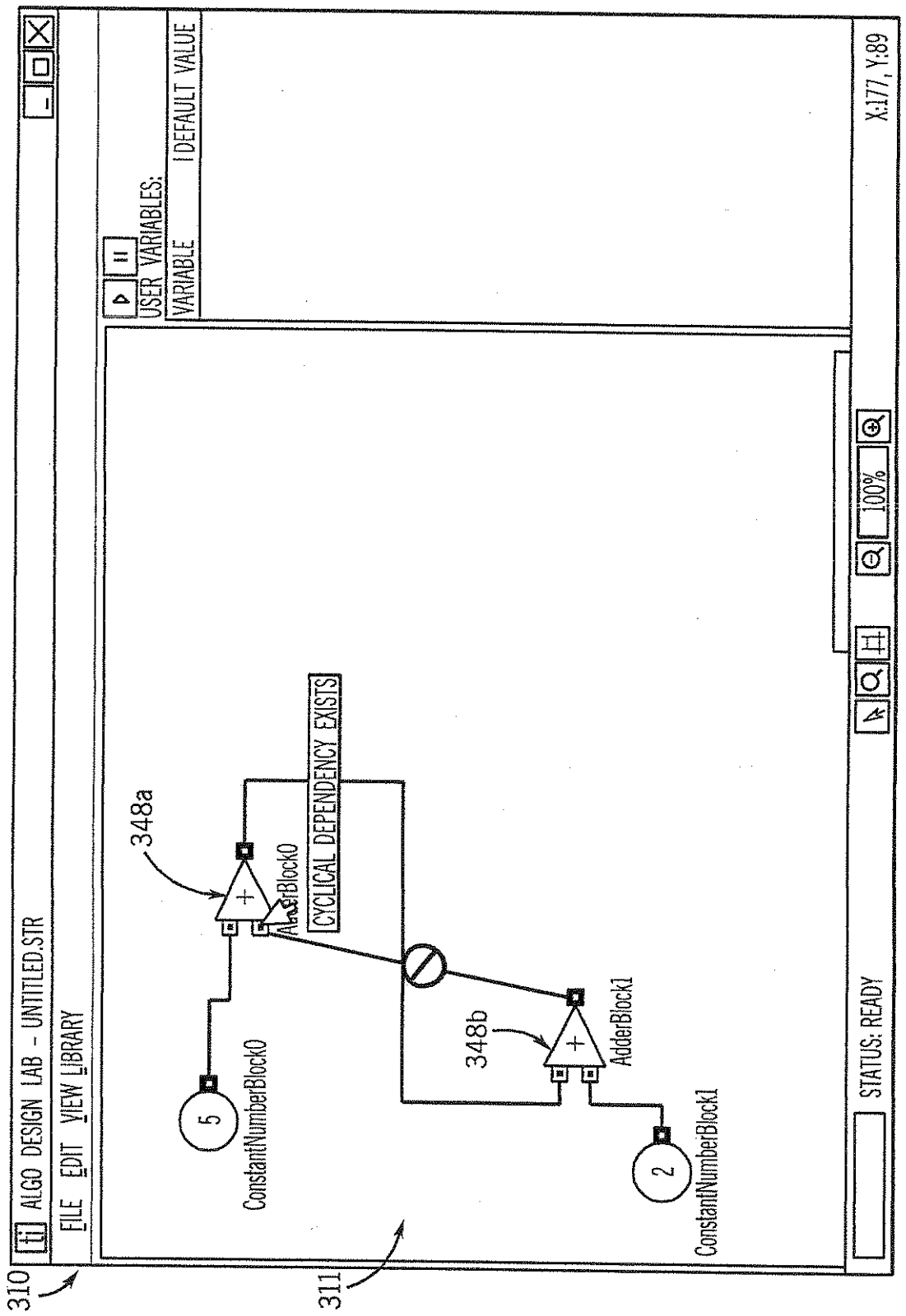

310
ALGO DESIGN LAB - UNTITLED.STR
FILE EDIT VIEW LIBRARY
USER VARIABLES:
VARIABLE
DEFAULT VALUE
311
348a
AdderBlock0
CYCLICAL DEPENDENCY EXISTS
348b
AdderBlock1
5
ConstantNumberBlock0
2
ConstantNumberBlock1
STATUS: READY
100%
X:177, Y:89

FIG. 3K

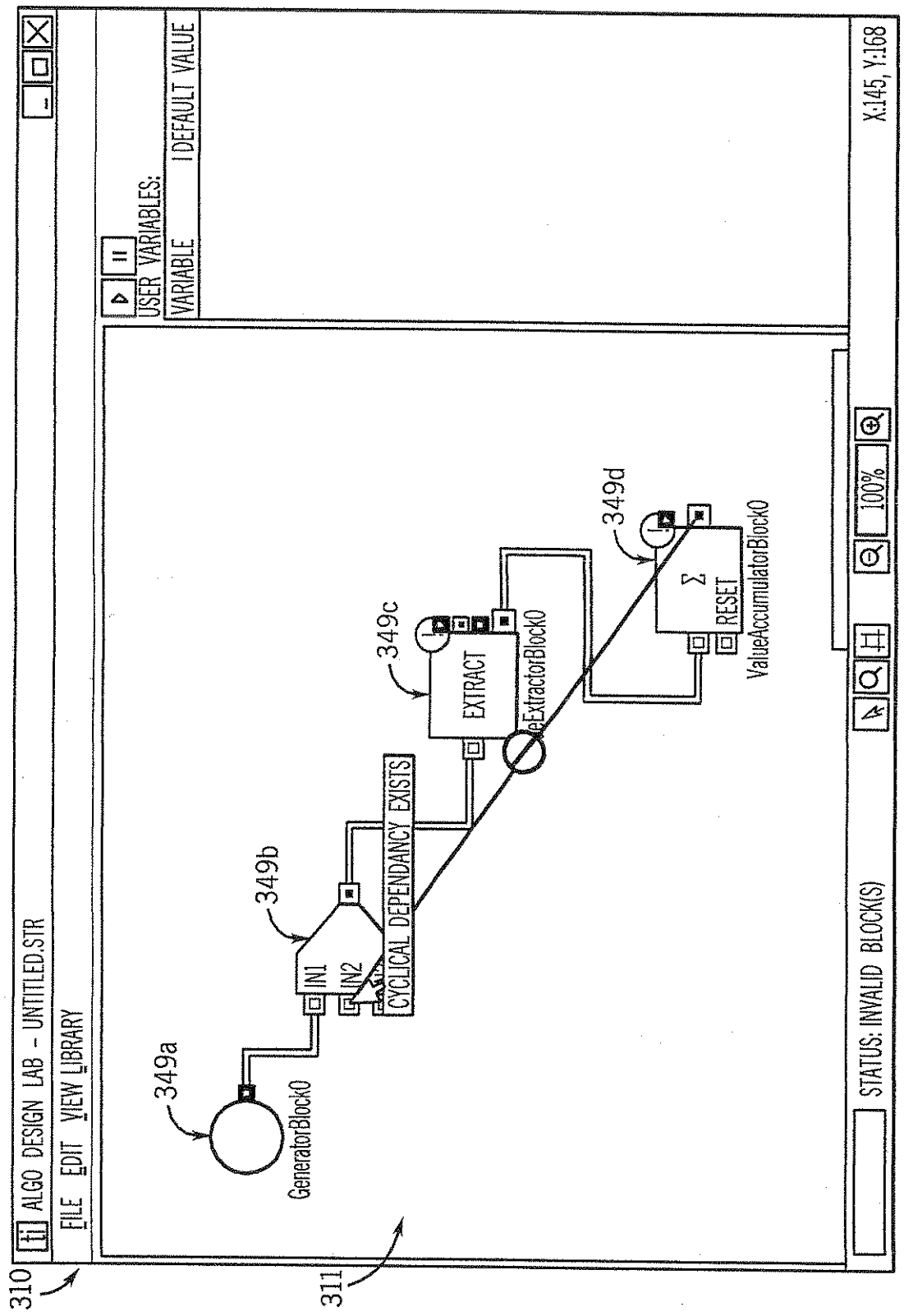

310
ALGO DESIGN LAB - UNTITLED.STR
FILE EDIT VIEW LIBRARY
USER VARIABLES:
VARIABLE
DEFAULT VALUE
311
349a
GeneratorBlock0
349b
IN1
IN2
CYCLICAL DEPENDANCY EXISTS
349c
EXTRACT
eExtractorBlock0
349d
Σ
RESET
ValueAccumulatorBlock0
100%
STATUS: INVALID BLOCK(S)
X:145, Y:168

FIG. 3L

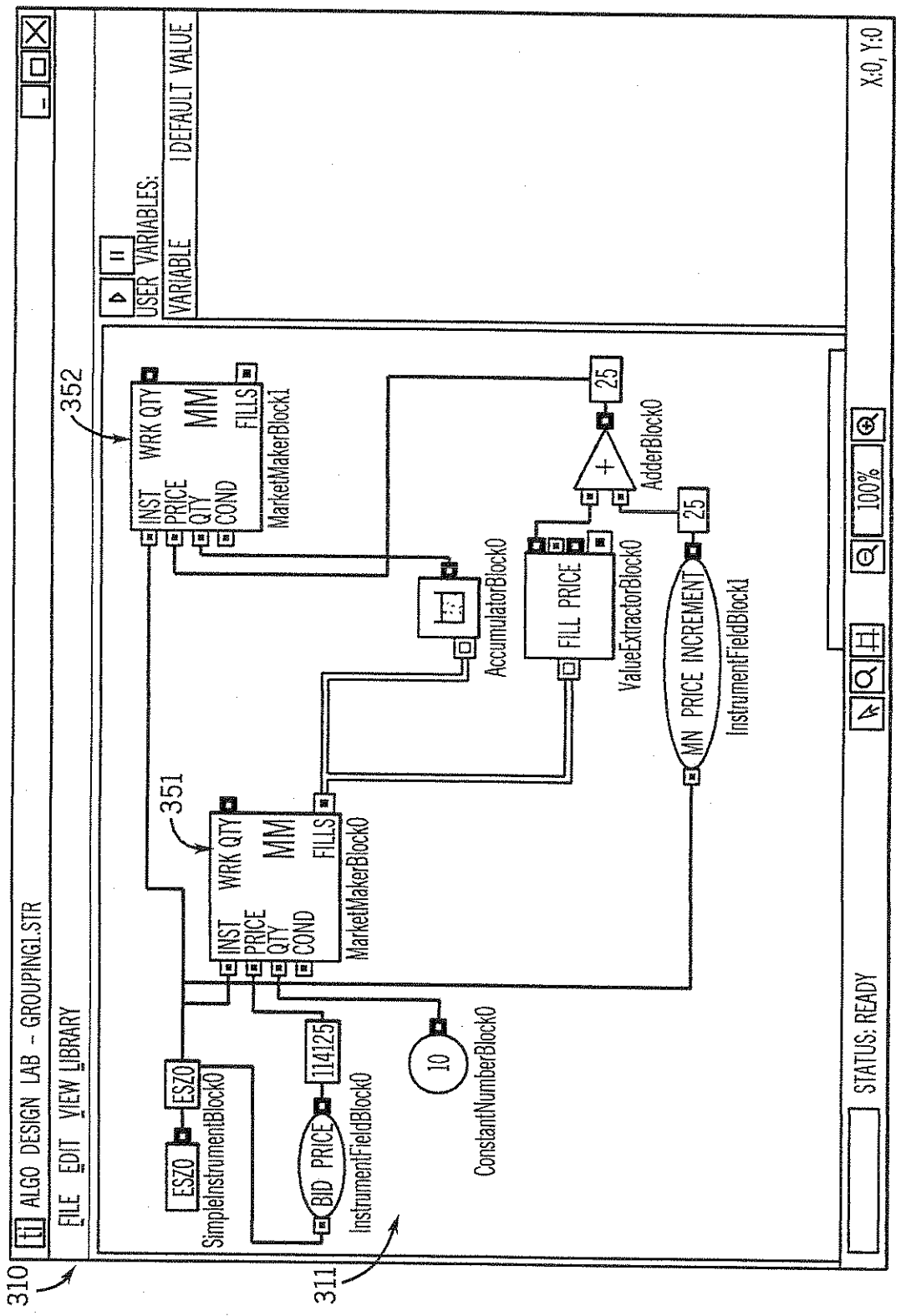

ALGO DESIGN LAB - GROUPING1.STR
FILE EDIT VIEW LIBRARY
USER VARIABLES:
VARIABLE
DEFAULT VALUE
STATUS: READY
X:0, Y:0
100%
310
311
352
351
INST
PRICE
QTY
COND
WRK QTY
MM
FILLS
MarketMakerBlock1
MarketMakerBlock0
AccumulatorBlock0
FILL PRICE
ValueExtractorBlock0
25
AdderBlock0
MIN PRICE INCREMENT
InstrumentFieldBlock1
ESZ0
SimpleInstrumentBlock0
BID PRICE
114125
InstrumentFieldBlock0
10
ConstantNumberBlock0

FIG. 3M

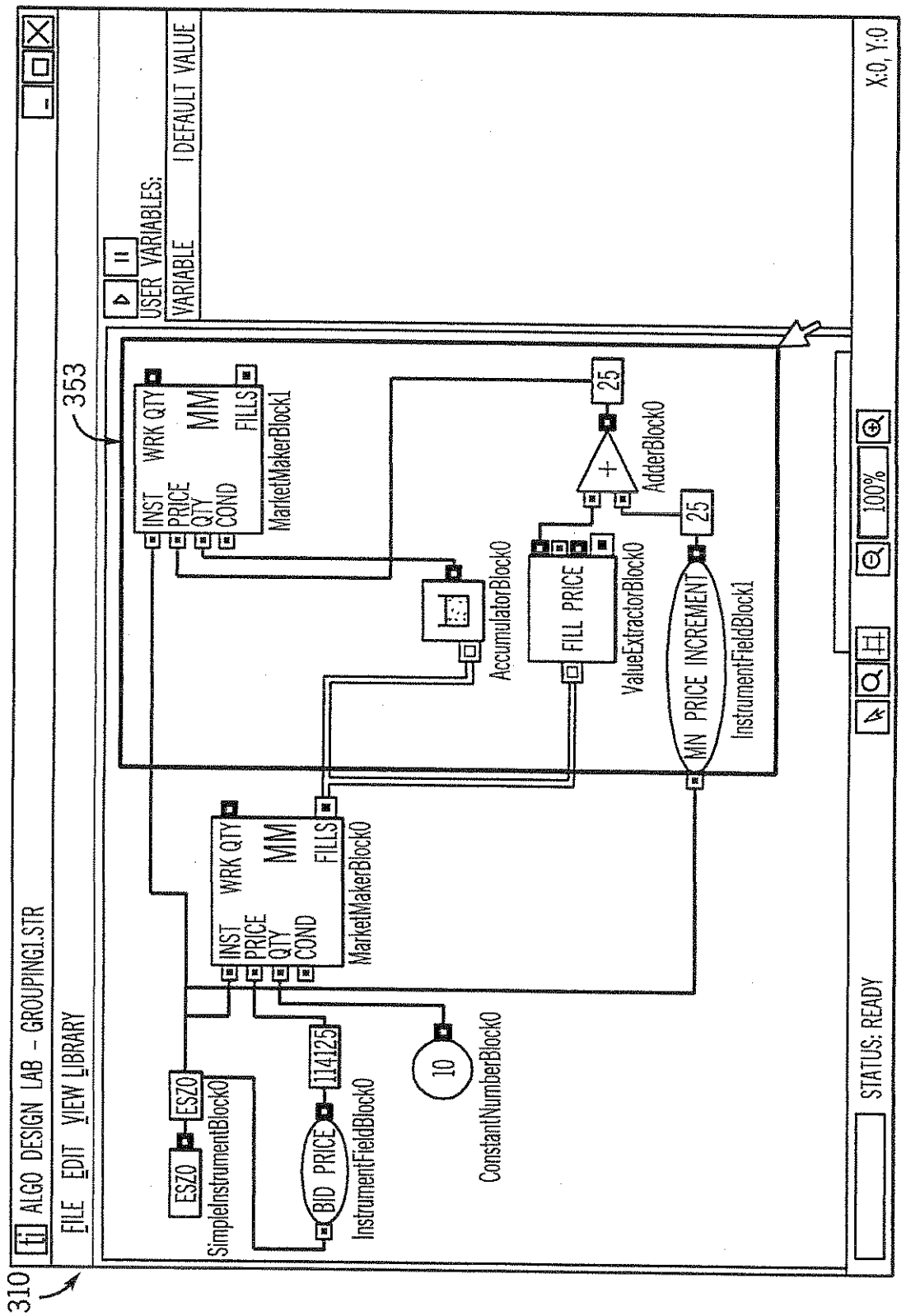

310
ALGO DESIGN LAB - GROUPING1.STR
FILE EDIT VIEW LIBRARY
353
USER VARIABLES:
VARIABLE
DEFAULT VALUE
INST
PRICE
QTY
COND
WRK QTY
MM
FILLS
MarketMakerBlock1
MarketMakerBlock0
AccumulatorBlock0
FILL PRICE
ValueExtractorBlock0
25
AdderBlock0
MIN PRICE INCREMENT
InstrumentFieldBlock1
ESZ0
SimpleInstrumentBlock0
BID PRICE
114125
InstrumentFieldBlock0
10
ConstantNumberBlock0
100%
STATUS: READY
X:0, Y:0

FIG. 3N

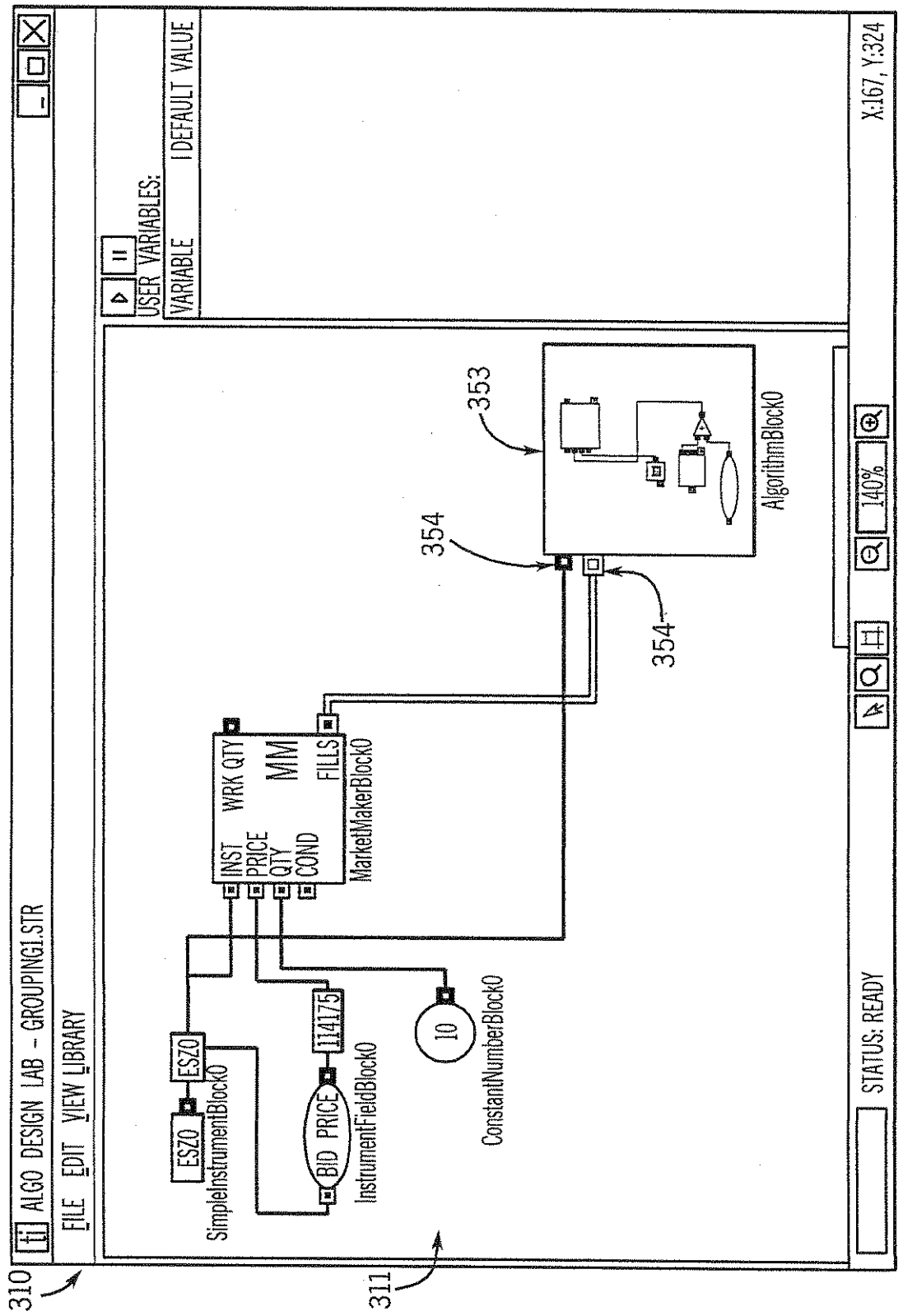

310
311
ALGO DESIGN LAB - GROUPING1.STR
FILE EDIT VIEW LIBRARY
USER VARIABLES:
VARIABLE
DEFAULT VALUE
353
354
354
AlgorithmBlock0
INST
PRICE
QTY
COND
WRK QTY
MM
FILLS
MarketMakerBlock0
ES20
ES20
SimpleInstrumentBlock0
BID PRICE
1114175
InstrumentFieldBlock0
10
ConstantNumberBlock0
140%
STATUS: READY
X:167, Y:324

FIG. 30

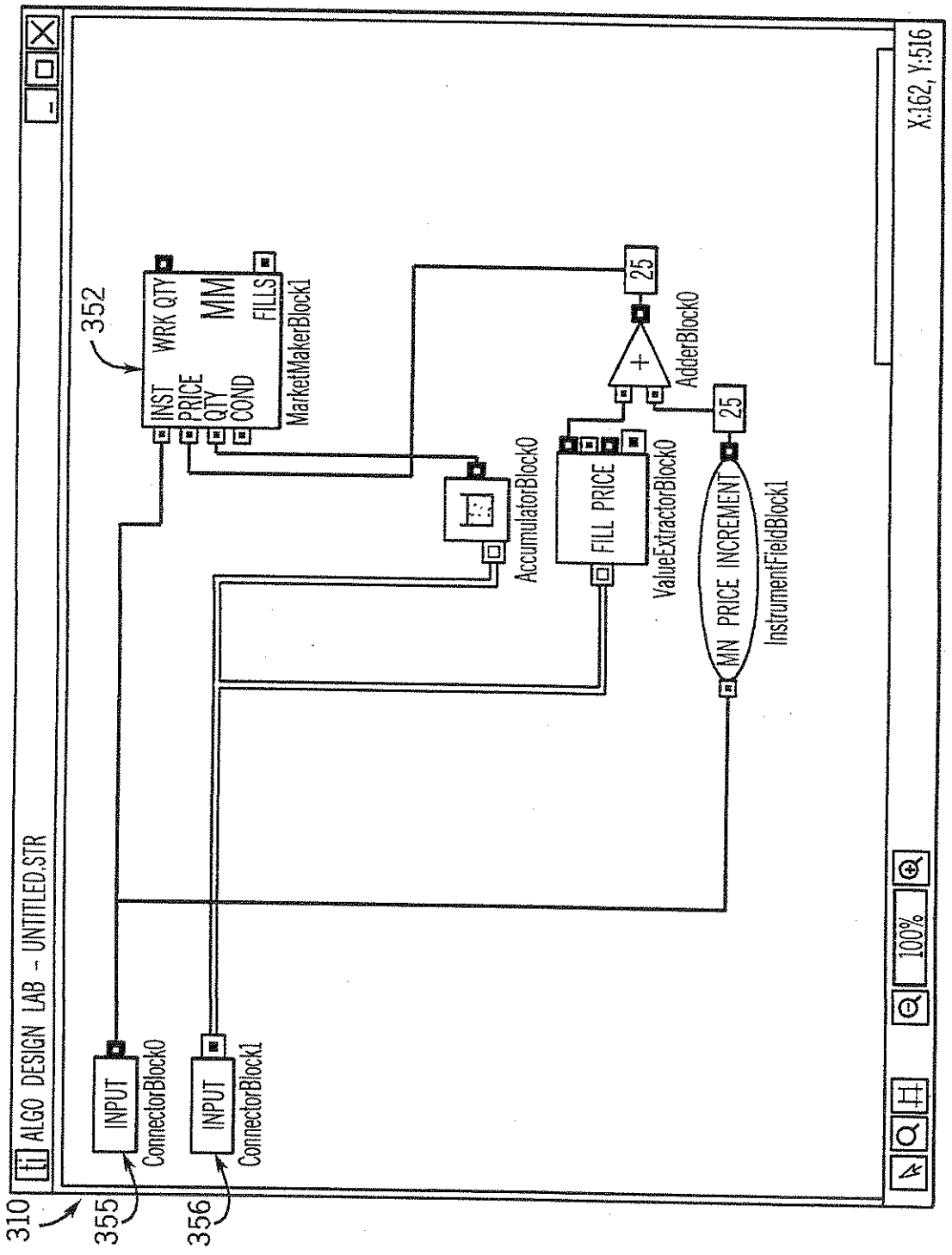

310
ALGO DESIGN LAB - UNTITLED.STR
X:162, Y:516
100%
352
INST
PRICE
QTY
COND
WRK QTY
MM
FILLS
MarketMakerBlock1
355
INPUT
ConnectorBlock0
356
INPUT
ConnectorBlock1
AccumulatorBlock0
FILL PRICE
ValueExtractorBlock0
25
+
AdderBlock0
25
MIN PRICE INCREMENT
InstrumentFieldBlock1

FIG. 3P

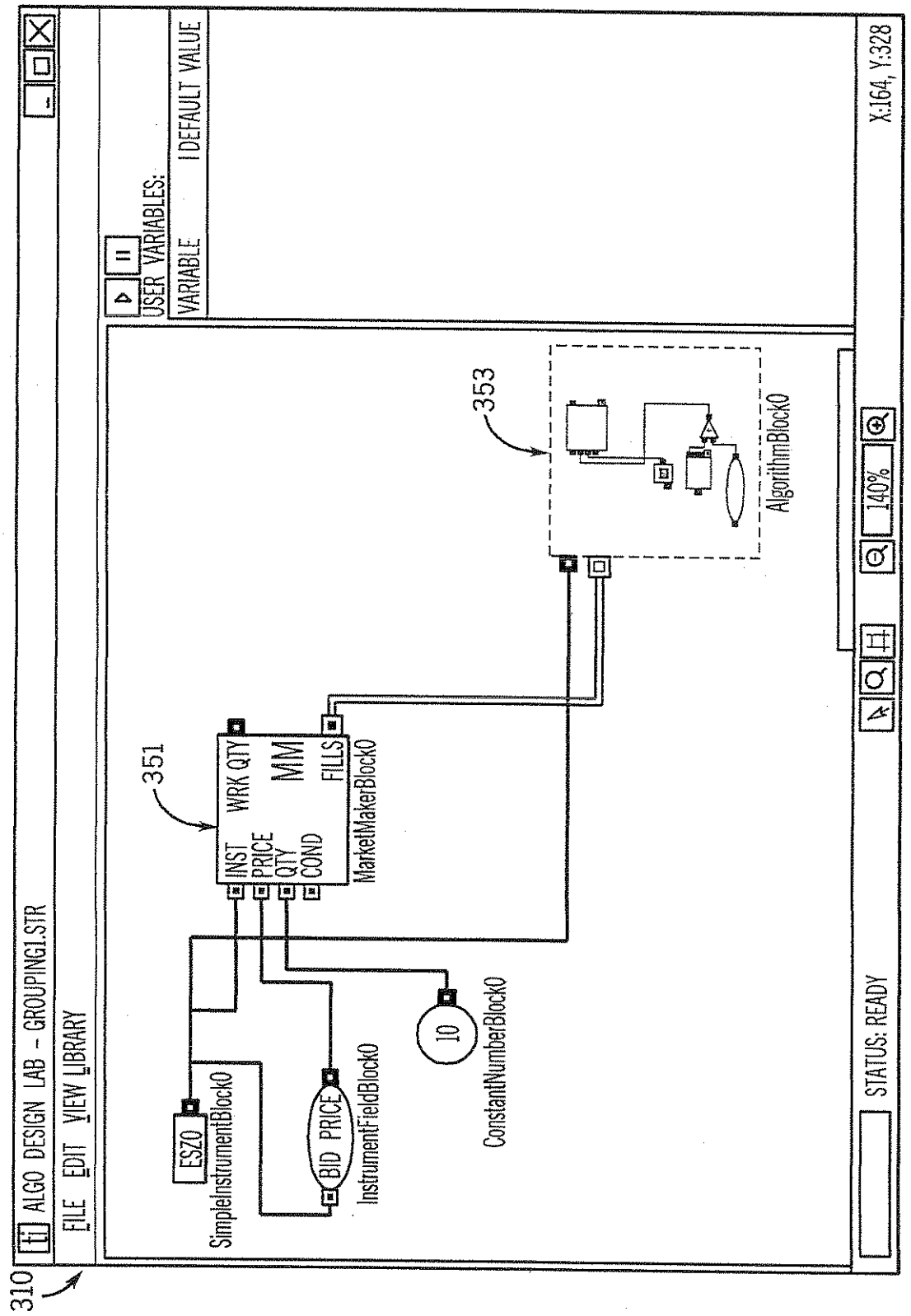

310
ALGO DESIGN LAB – GROUPING1.STR
FILE EDIT VIEW LIBRARY
USER VARIABLES:
VARIABLE
DEFAULT VALUE
X:164, Y:328
STATUS: READY
140%
351
INST
PRICE
QTY
COND
WRK QTY
MM
FILLS
MarketMakerBlock0
353
AlgorithmBlock0
ESZ0
SimpleInstrumentBlock0
BID PRICE
InstrumentFieldBlock0
10
ConstantNumberBlock0

FIG. 3Q

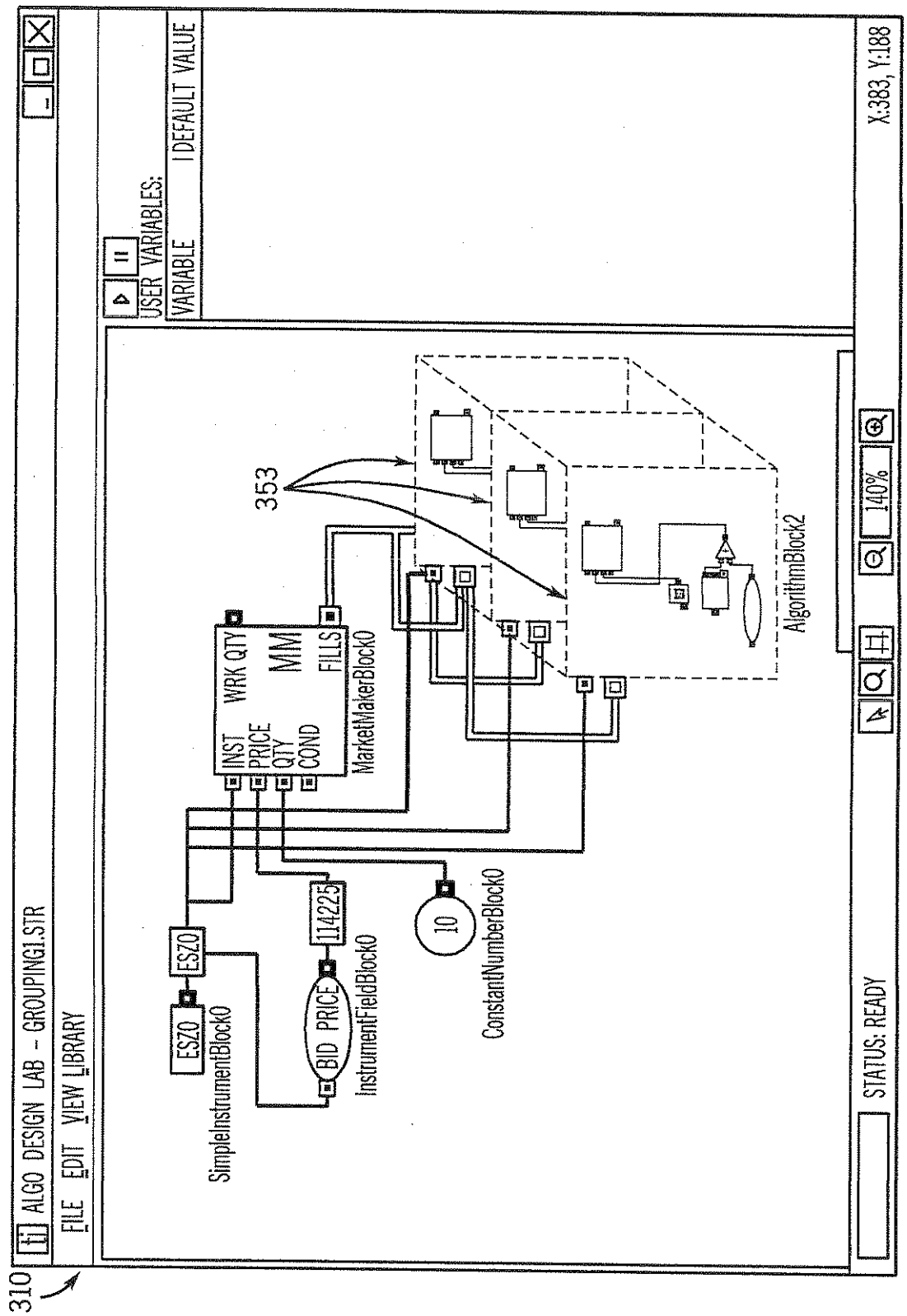

310
ALGO DESIGN LAB – GROUPING1.STR
FILE EDIT VIEW LIBRARY
USER VARIABLES:
VARIABLE
DEFAULT VALUE
353
INST
PRICE
QTY
COND
WRK QTY
MM
FILLS
MarketMakerBlock0
ES20
ES20
SimpleInstrumentBlock0
114225
BID PRICE
InstrumentFieldBlock0
10
ConstantNumberBlock0
AlgorithmBlock2
140%
STATUS: READY
X:383, Y:188

FIG. 3R

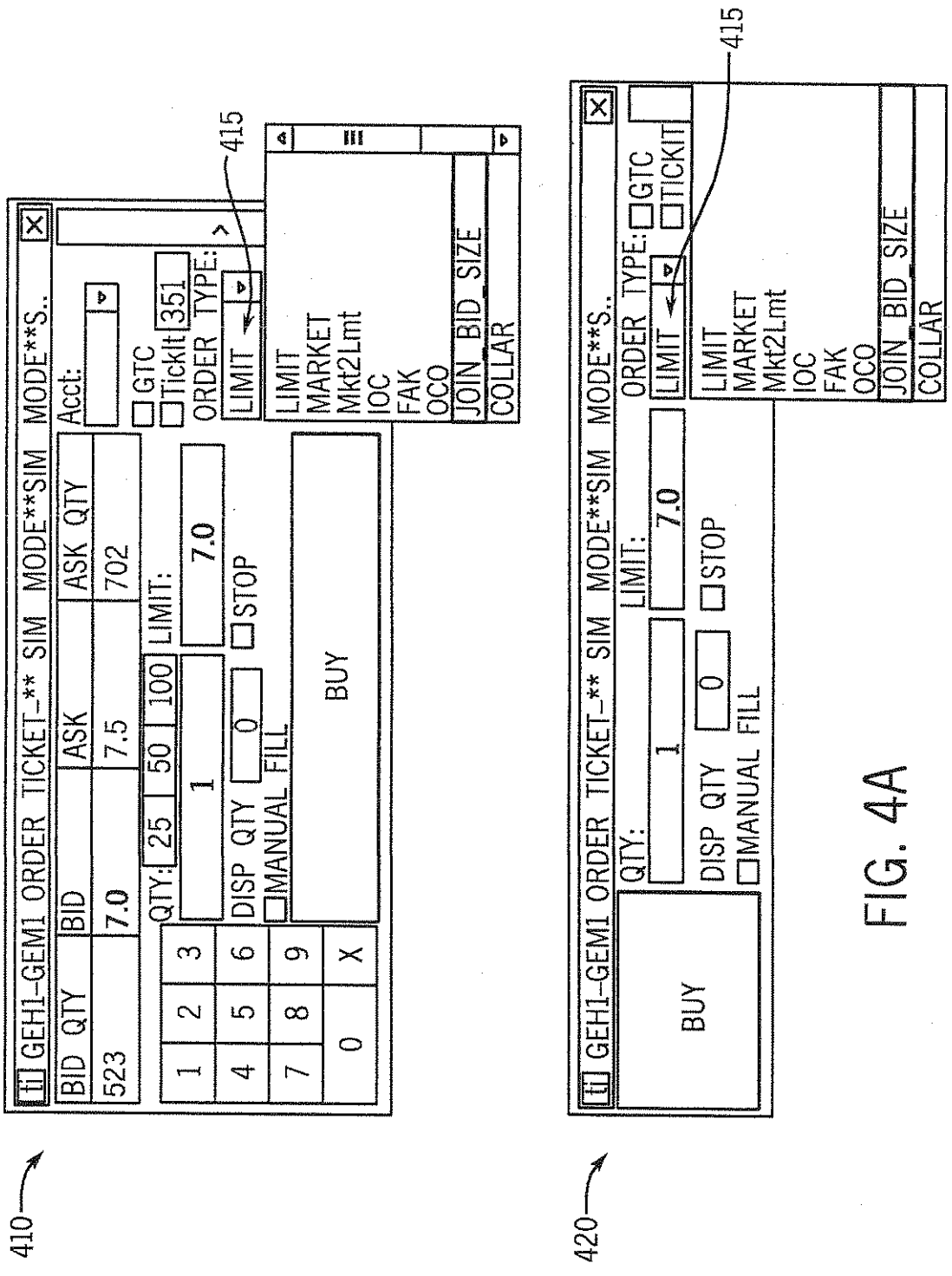

410
GEH1-GEM1 ORDER TICKET-** SIM MODE**S..
BID QTY
BID
ASK
ASK QTY
523
7.0
7.5
702
Acct:
GTC
TickIt
351
ORDER TYPE:
LIMIT
415
LIMIT
MARKET
Mkt2Lmt
IOC
FAK
OCO
JOIN_BID_SIZE
COLLAR
QTY:
25
50
100
1
LIMIT:
7.0
DISP QTY
0
STOP
MANUAL FILL
BUY
1 2 3
4 5 6
7 8 9
0 X
420
GEH1-GEM1 ORDER TICKET-** SIM MODE**S..
QTY:
1
LIMIT:
7.0
ORDER TYPE:
GTC
TICKIT
LIMIT
415
LIMIT
MARKET
Mkt2Lmt
IOC
FAK
OCO
JOIN_BID_SIZE
COLLAR
BUY
DISP QTY
0
STOP
MANUAL FILL

FIG. 4A

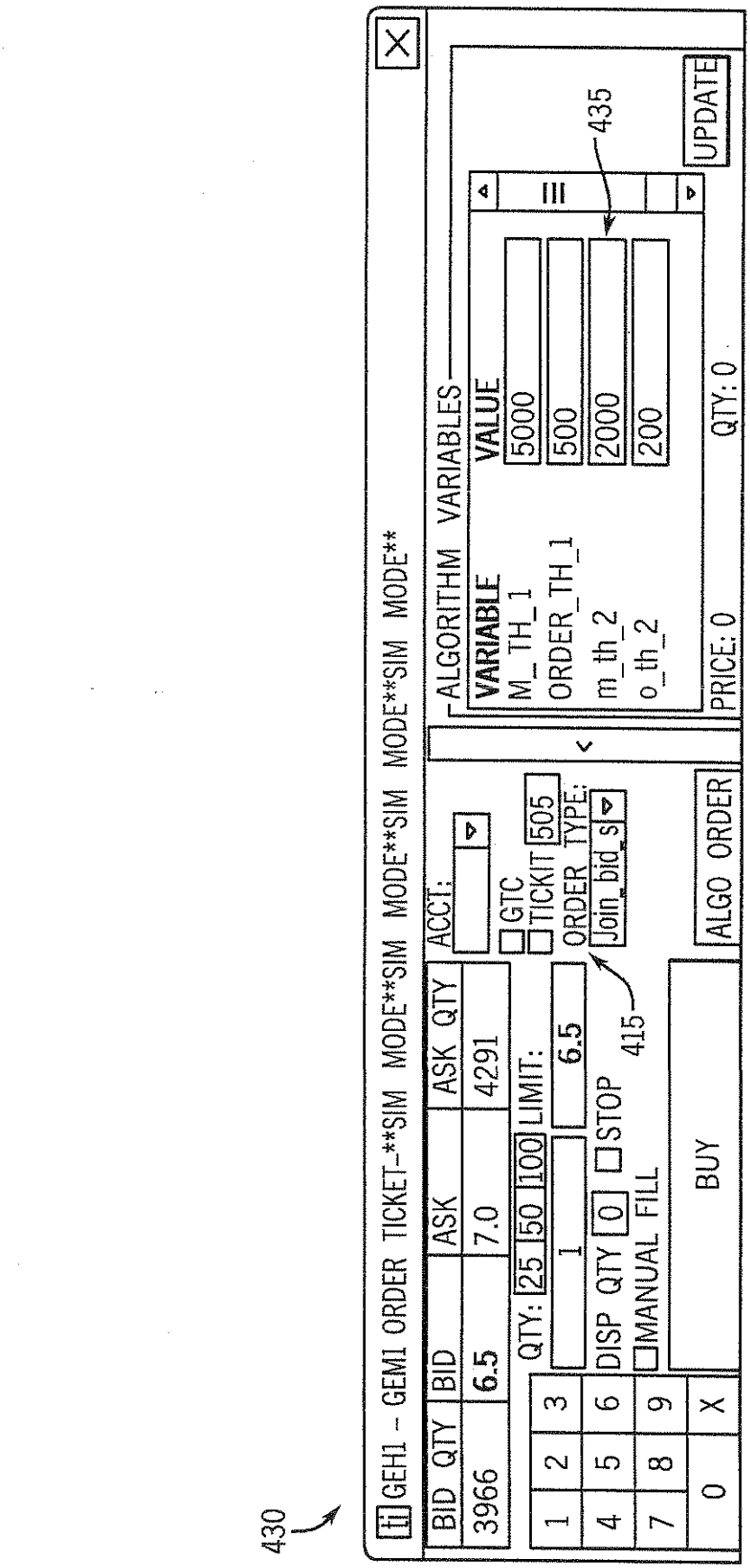

430
GEH1 – GEM1 ORDER TICKET–**SIM MODE**SIM MODE**SIM MODE**SIM MODE**
BID QTY
3966
BID
6.5
ASK
7.0
ASK QTY
4291
QTY: 25 50 100
1
LIMIT:
6.5
ACCT:
GTC
TICKIT 505
ORDER TYPE:
Join_bid_s
DISP QTY 0
STOP
MANUAL FILL
415
1 2 3
4 5 6
7 8 9
0 X
BUY
ALGO ORDER
ALGORITHM VARIABLES
VARIABLE
M_TH_1
ORDER_TH_1
m_th_2
o_th_2
VALUE
5000
500
2000
200
435
PRICE: 0
QTY: 0
UPDATE

FIG. 4B

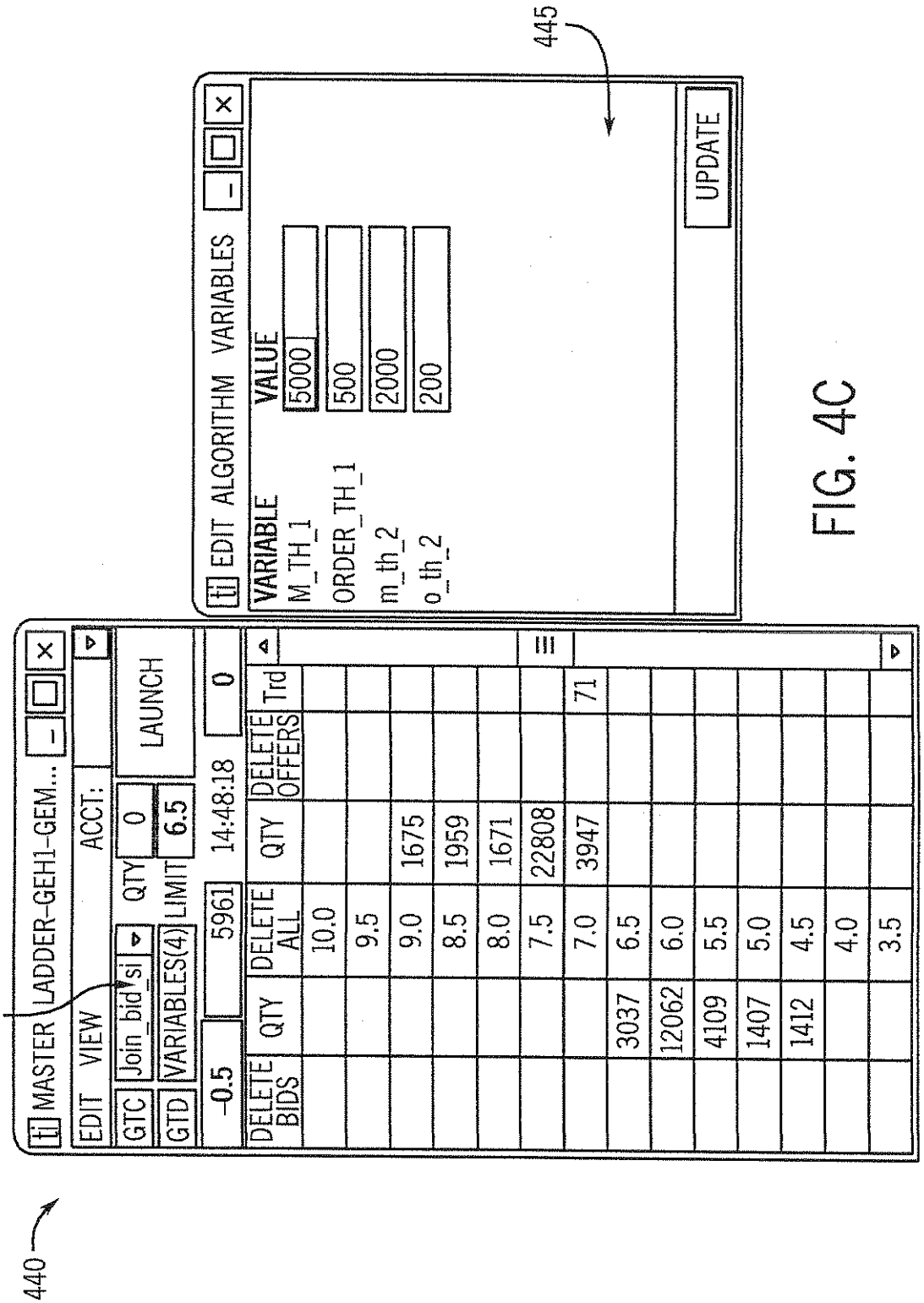

440
415
445
MASTER LADDER-GEH1-GEM...
EDIT VIEW
ACCT:
GTC
Join_bid_si
QTY
0
LAUNCH
GTD
VARIABLES(4)
LIMIT
6.5
-0.5
5961
14:48:18
0
DELETE BIDS
QTY
DELETE ALL
QTY
DELETE OFFERS
Trd
10.0
9.5
9.0
1675
8.5
1959
8.0
1671
7.5
22808
7.0
3947
71
3037
6.5
12062
6.0
4109
5.5
1407
5.0
1412
4.5
4.0
3.5
EDIT ALGORITHM VARIABLES
VARIABLE
VALUE
M_TH_1
5000
ORDER_TH_1
500
m_th_2
2000
o_th_2
200
UPDATE

FIG. 4C

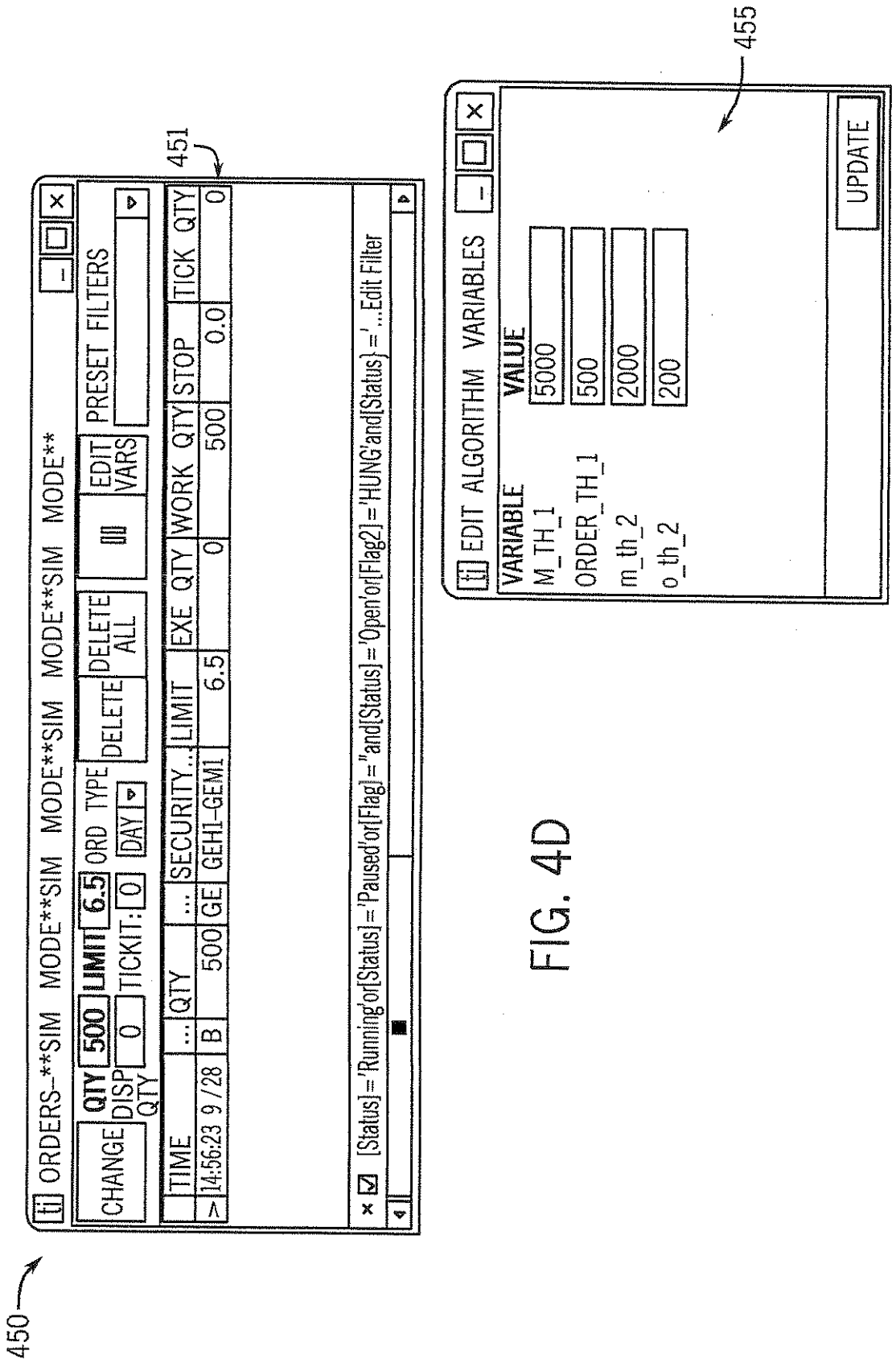

450
ORDERS_**SIM MODE**SIM MODE**SIM MODE**SIM MODE**
CHANGE
QTY 500 LIMIT 6.5 ORD TYPE
DISP QTY 0 TICKIT: 0 DAY
DELETE
DELETE ALL
EDIT VARS
PRESET FILTERS
451
TIME ... QTY ... SECURITY... LIMIT EXE QTY WORK QTY STOP TICK QTY
> 14:56:23 9/28 B 500 GE GEH1-GEM1 6.5 0 500 0.0 0
[Status] = 'Running'or[Status] = 'Paused'or[Flag] = "and[Status] = 'Open'or[Flag2] = 'HUNG'and[Status] = '...Edit Filter
455
EDIT ALGORITHM VARIABLES
VARIABLE VALUE
M_TH_1 5000
ORDER_TH_1 500
m_th_2 2000
o_th_2 200
UPDATE

FIG. 4D

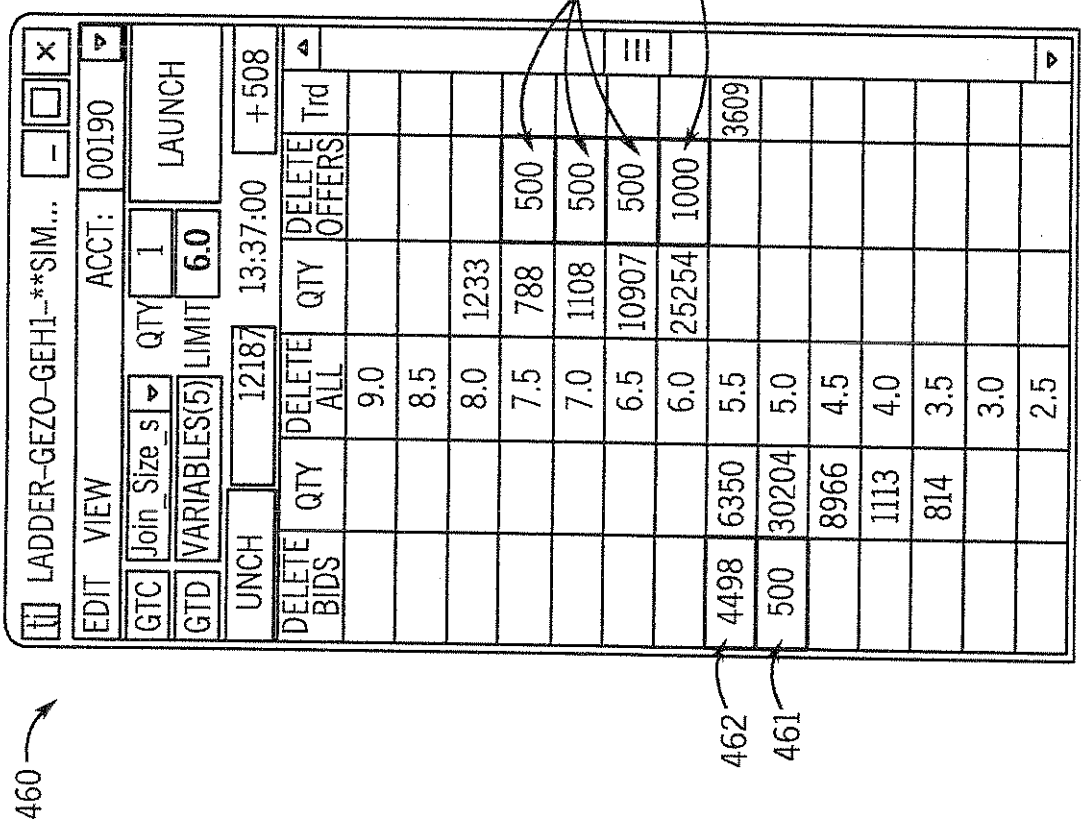

460
LADDER-GEZO-GEH1-**SIM...
EDIT VIEW
ACCT: 00190
GTC
Join_Size_s
QTY 1
LAUNCH
GTD
VARIABLES(5)
LIMIT 6.0
UNCH 12187
13:37:00
+508
DELETE BIDS
QTY
DELETE ALL
QTY
DELETE OFFERS
Trd
9.0
8.5
8.0
7.5
7.0
6.5
6.0
5.5
5.0
4.5
4.0
3.5
3.0
2.5
4498
6350
500
30204
8966
1113
814
1233
788
1108
10907
25254
500
500
500
1000
3609
461
462
462
461

FIG. 4E

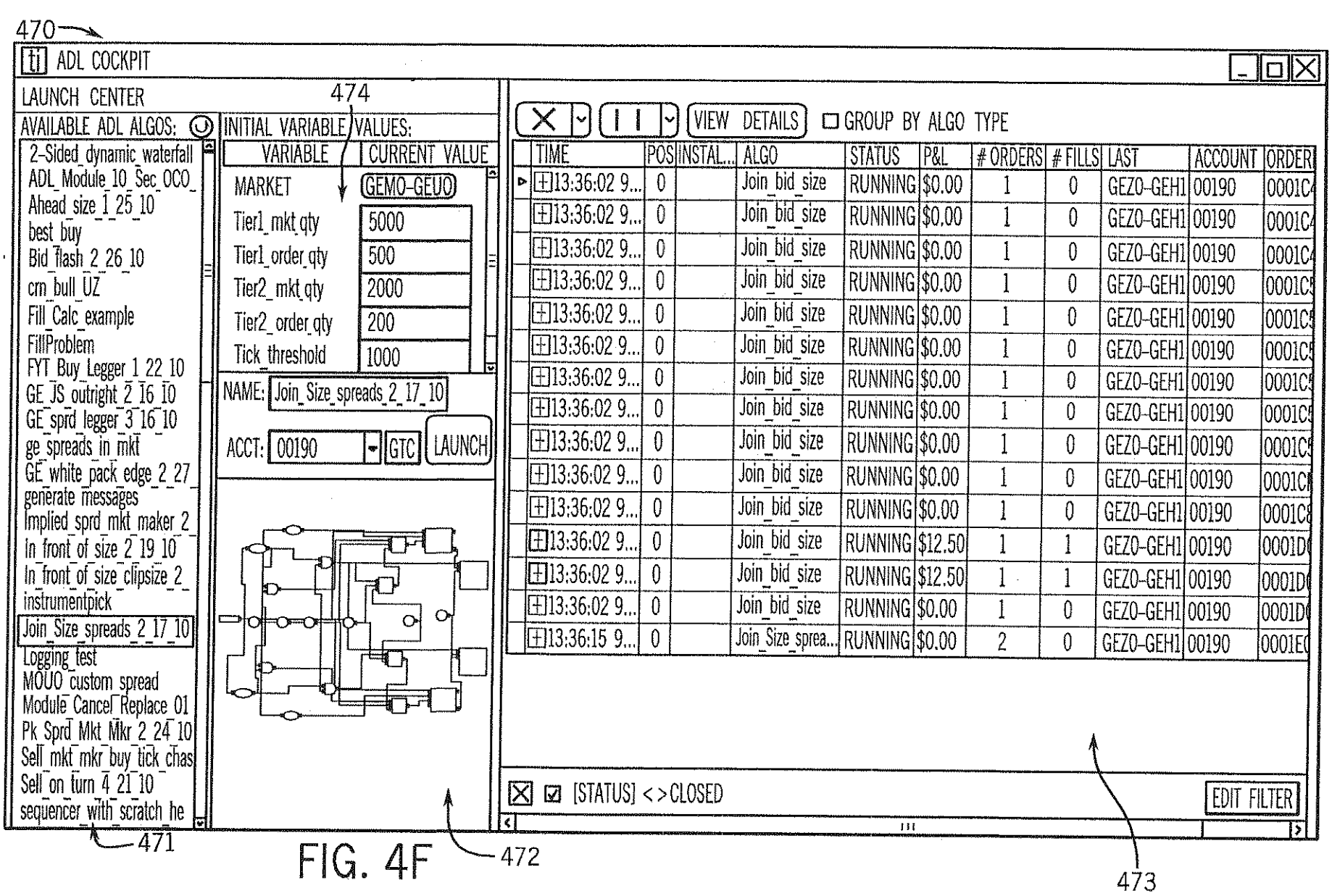

470
ADL COCKPIT
LAUNCH CENTER
474
AVAILABLE ADL ALGOS:
2-Sided_dynamic_waterfall
ADL_Module_10_Sec_OCO_
Ahead_size_1_25_10
best_buy
Bid_flash_2_26_10
crn_bull_UZ
Fill_Calc_example
FillProblem
FYT_Buy_Legger_1_22_10
GE_JS_outright_2_16_10
GE_sprd_legger_3_16_10
ge_spreads_in_mkt
GE_white_pack_edge_2_27
generate_messages
Implied_sprd_mkt_maker_2_
In_front_of_size_2_19_10
In_front_of_size_clipsize_2_
instrumentpick
Join_Size_spreads_2_17_10
Logging_test
MOUO_custom_spread
Module_Cancel_Replace_01
Pk_Sprd_Mkt_Mkr_2_24_10
Sell_mkt_mkr_buy_tick_chas
Sell_on_turn_4_21_10
sequencer_with_scratch_he
INITIAL VARIABLE VALUES:
VARIABLE
CURRENT VALUE
MARKET
GEMO-GEUO
Tier1_mkt_qty
5000
Tier1_order_qty
500
Tier2_mkt_qty
2000
Tier2_order_qty
200
Tick_threshold
1000
NAME:
Join_Size_spreads_2_17_10
ACCT:
00190
GTC
LAUNCH
VIEW DETAILS
GROUP BY ALGO TYPE
TIME
POS
INSTAL...
ALGO
STATUS
P&L
ORDERS
FILLS
LAST
ACCOUNT
ORDER
13:36:02 9...
0
Join_bid_size
RUNNING
$0.00
1
0
GEZ0-GEH1
00190
0001C4
13:36:02 9...
0
Join_bid_size
RUNNING
$0.00
1
0
GEZ0-GEH1
00190
0001C4
13:36:02 9...
0
Join_bid_size
RUNNING
$0.00
1
0
GEZ0-GEH1
00190
0001C4
13:36:02 9...
0
Join_bid_size
RUNNING
$0.00
1
0
GEZ0-GEH1
00190
0001C5
13:36:02 9...
0
Join_bid_size
RUNNING
$0.00
1
0
GEZ0-GEH1
00190
0001C5
13:36:02 9...
0
Join_bid_size
RUNNING
$0.00
1
0
GEZ0-GEH1
00190
0001C5
13:36:02 9...
0
Join_bid_size
RUNNING
$0.00
1
0
GEZ0-GEH1
00190
0001C5
13:36:02 9...
0
Join_bid_size
RUNNING
$0.00
1
0
GEZ0-GEH1
00190
0001C5
13:36:02 9...
0
Join_bid_size
RUNNING
$0.00
1
0
GEZ0-GEH1
00190
0001C5
13:36:02 9...
0
Join_bid_size
RUNNING
$0.00
1
0
GEZ0-GEH1
00190
0001C8
13:36:02 9...
0
Join_bid_size
RUNNING
$12.50
1
1
GEZ0-GEH1
00190
0001D0
13:36:02 9...
0
Join_bid_size
RUNNING
$12.50
1
1
GEZ0-GEH1
00190
0001D0
13:36:02 9...
0
Join_bid_size
RUNNING
$0.00
1
0
GEZ0-GEH1
00190
0001D0
13:36:15 9...
0
Join_Size_sprea...
RUNNING
$0.00
2
0
GEZ0-GEH1
00190
0001E0
[STATUS] <>CLOSED
EDIT FILTER
471
472
473

FIG. 4F

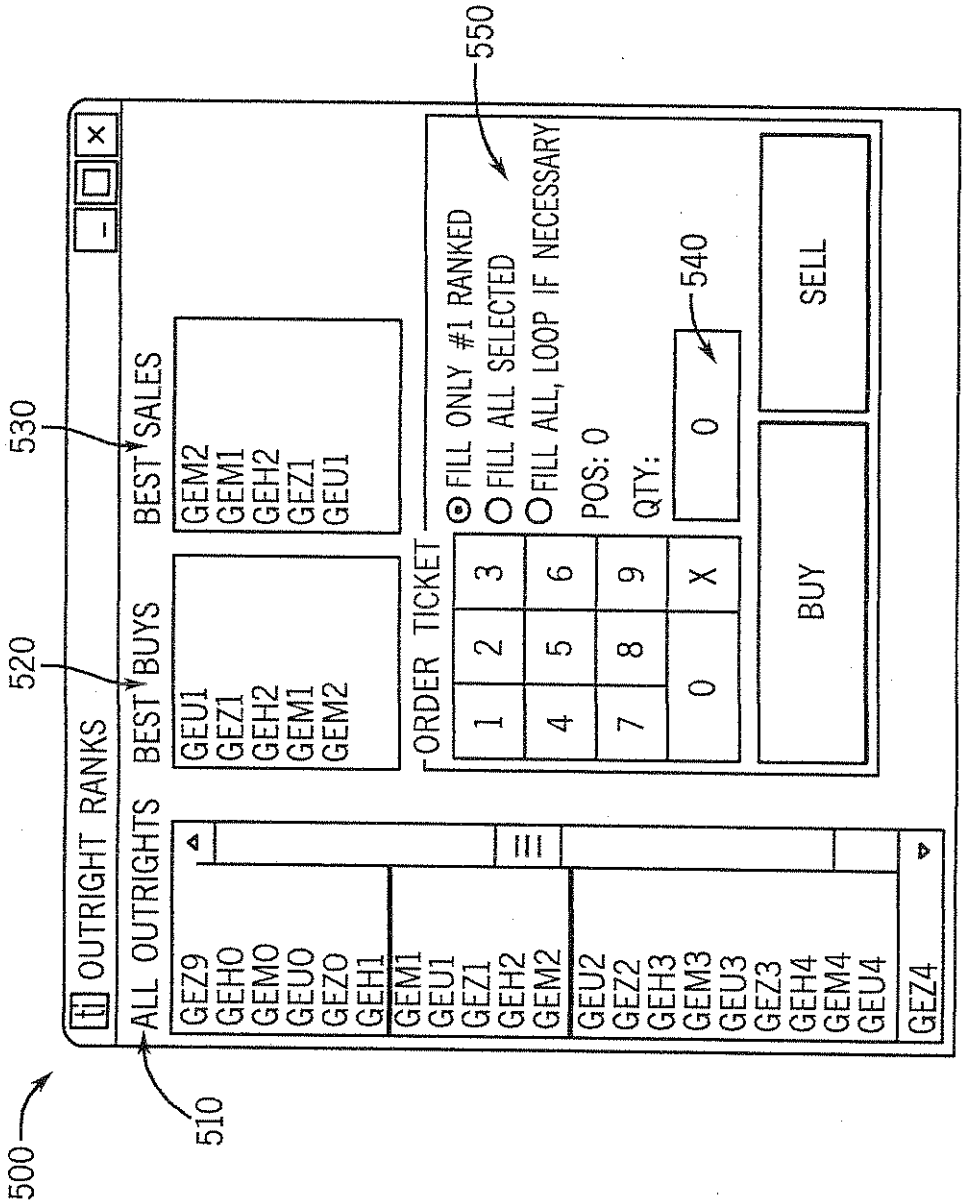

500
510
520
530
540
550
OUTRIGHT RANKS
ALL OUTRIGHTS
BEST BUYS
BEST SALES
GEZ9
GEH0
GEM0
GEU0
GEZ0
GEH1
GEM1
GEU1
GEZ1
GEH2
GEM2
GEU2
GEZ2
GEH3
GEM3
GEU3
GEZ3
GEH4
GEM4
GEU4
GEZ4
GEU1
GEZ1
GEH2
GEM1
GEM2
GEM2
GEM1
GEH2
GEZ1
GEU1
ORDER TICKET
FILL ONLY #1 RANKED
FILL ALL SELECTED
FILL ALL, LOOP IF NECESSARY
POS: 0
QTY:
1
2
3
4
5
6
7
8
9
0
X
0
BUY
SELL

FIG. 5

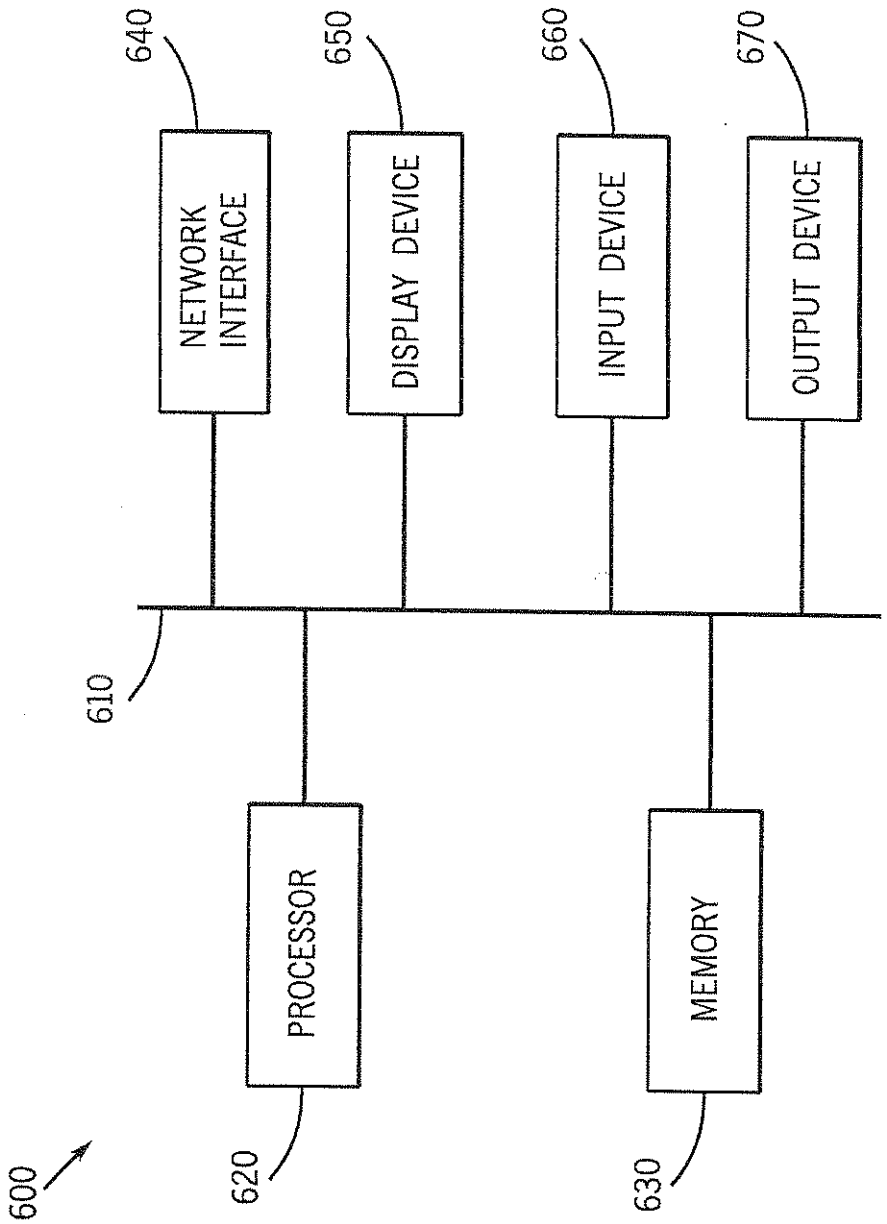

600
610
620
630
640
650
660
670
PROCESSOR
MEMORY
NETWORK INTERFACE
DISPLAY DEVICE
INPUT DEVICE
OUTPUT DEVICE

FIG. 6