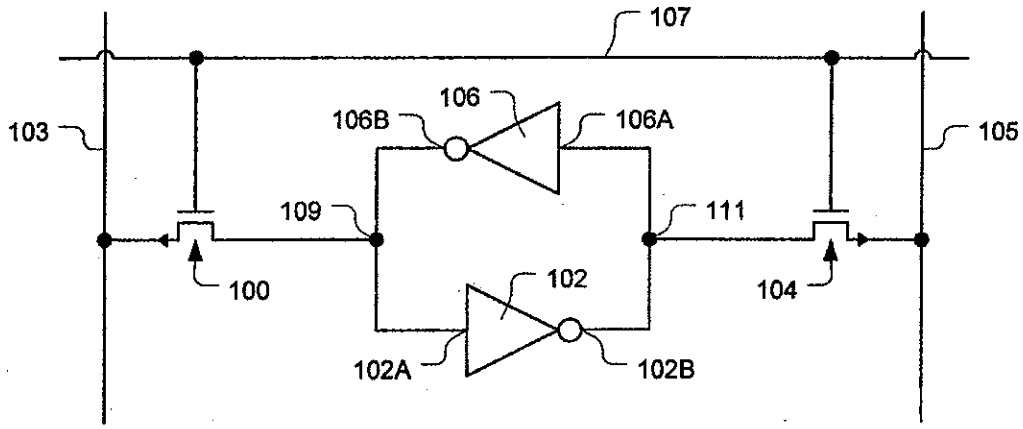


Fig. 1A
(Prior Art)

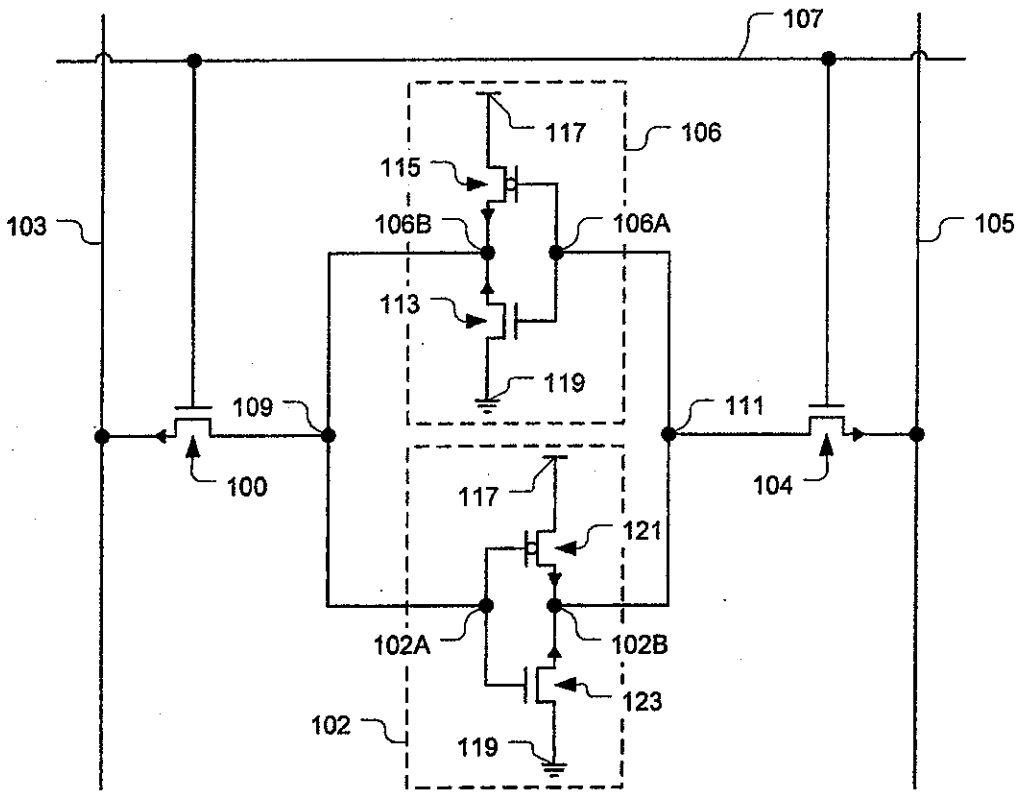


Fig. 1B
(Prior Art)

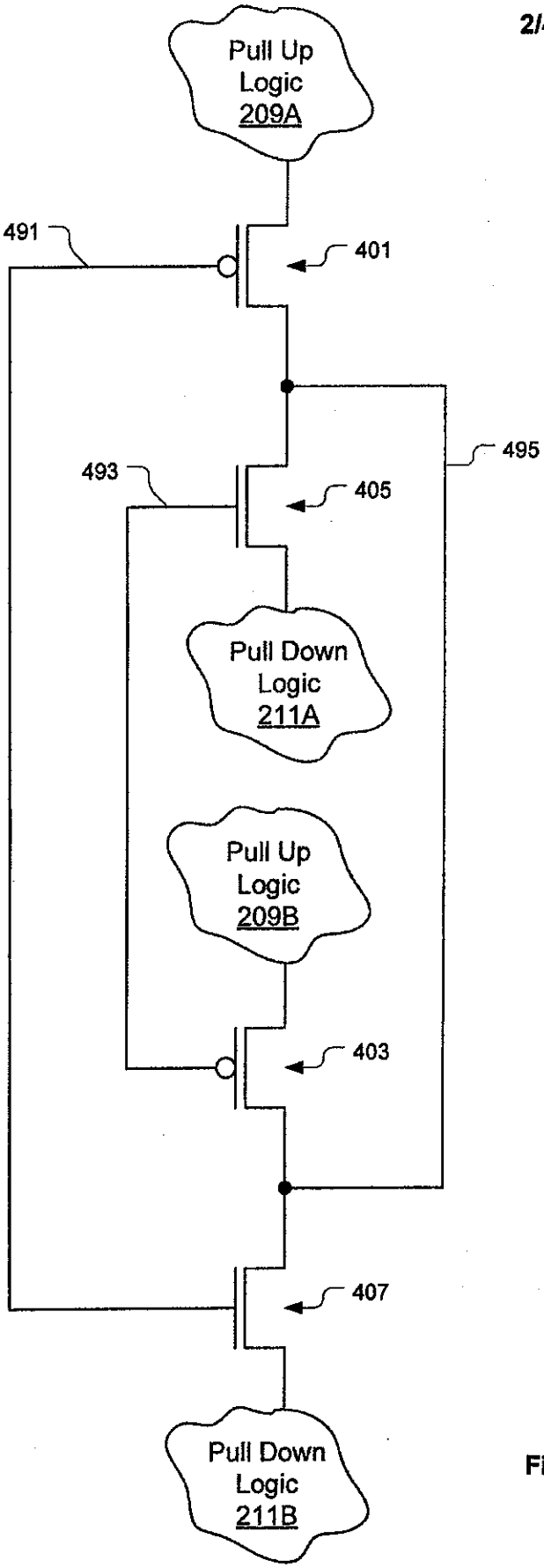

Pull Up Logic 209A
491
401
495
493
405
Pull Down Logic 211A
Pull Up Logic 209B
403
407
Pull Down Logic 211B

Fig. 2

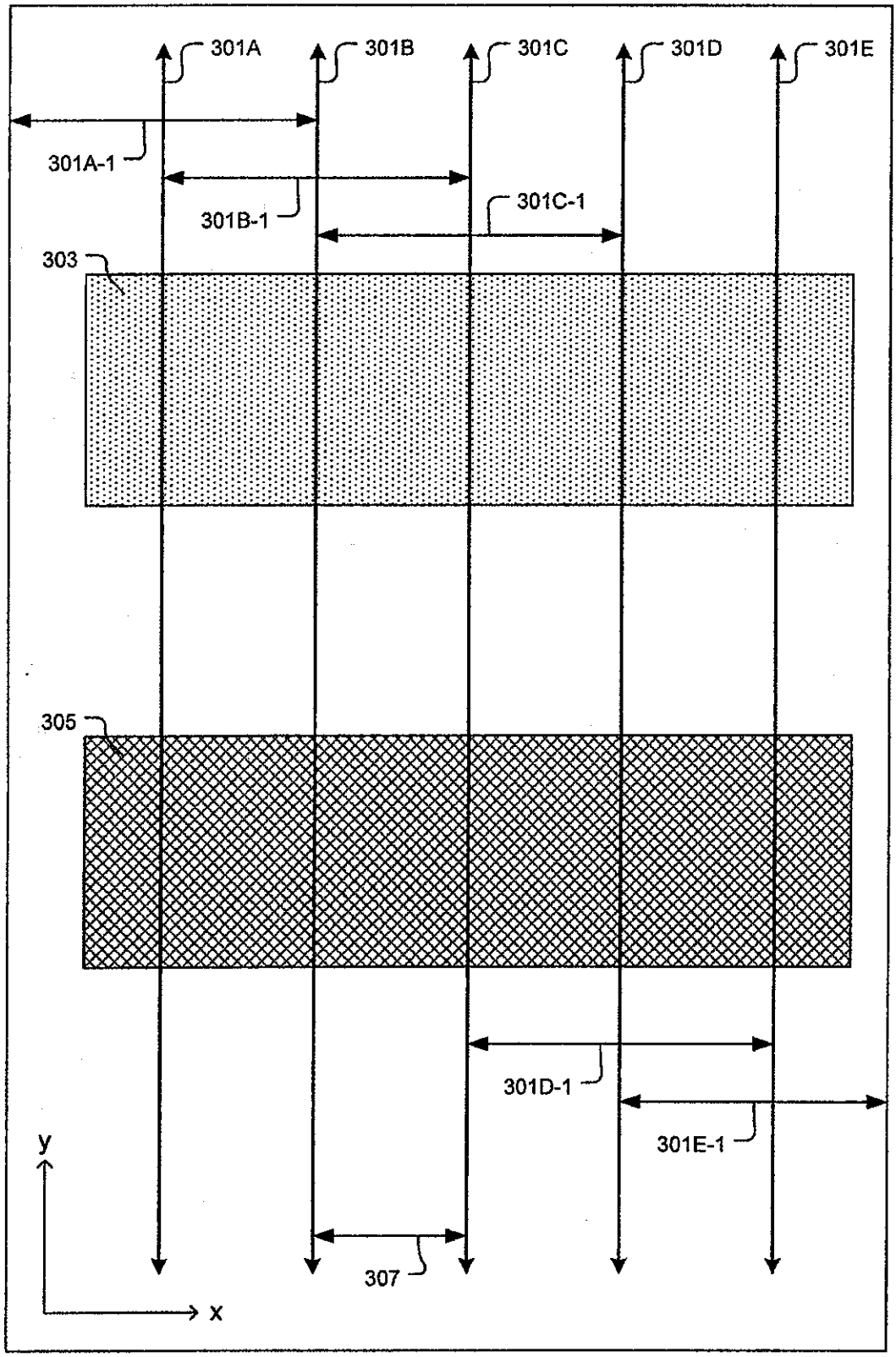

301A
301B
301C
301D
301E
301A-1
301B-1
301C-1
303
305
301D-1
301E-1
307
y
x

Fig. 3A

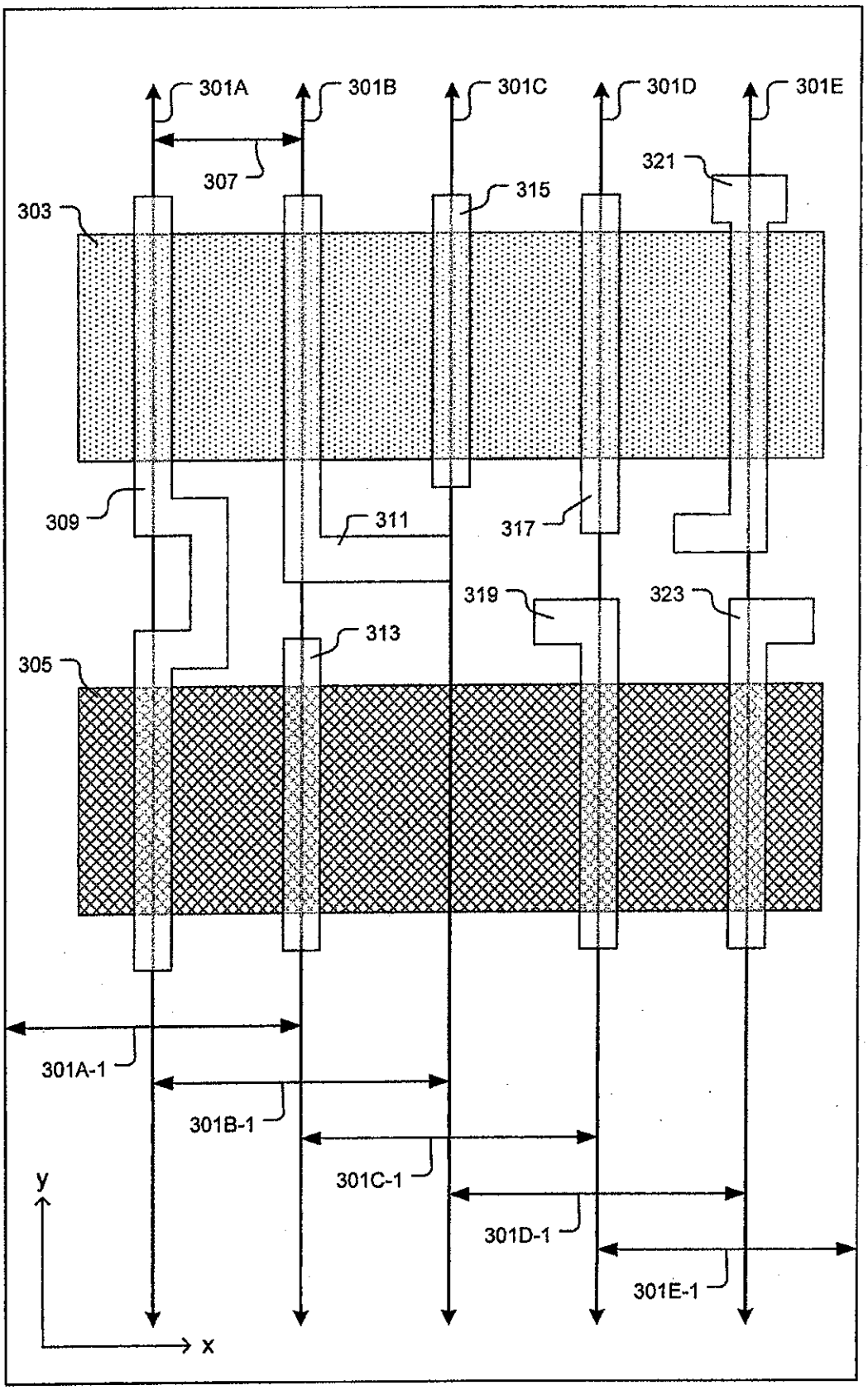

301A
301B
301C
301D
301E
307
321
315
303
309
311
317
319
323
313
305
301A-1
301B-1
301C-1
301D-1
301E-1
y
x

Fig. 3B

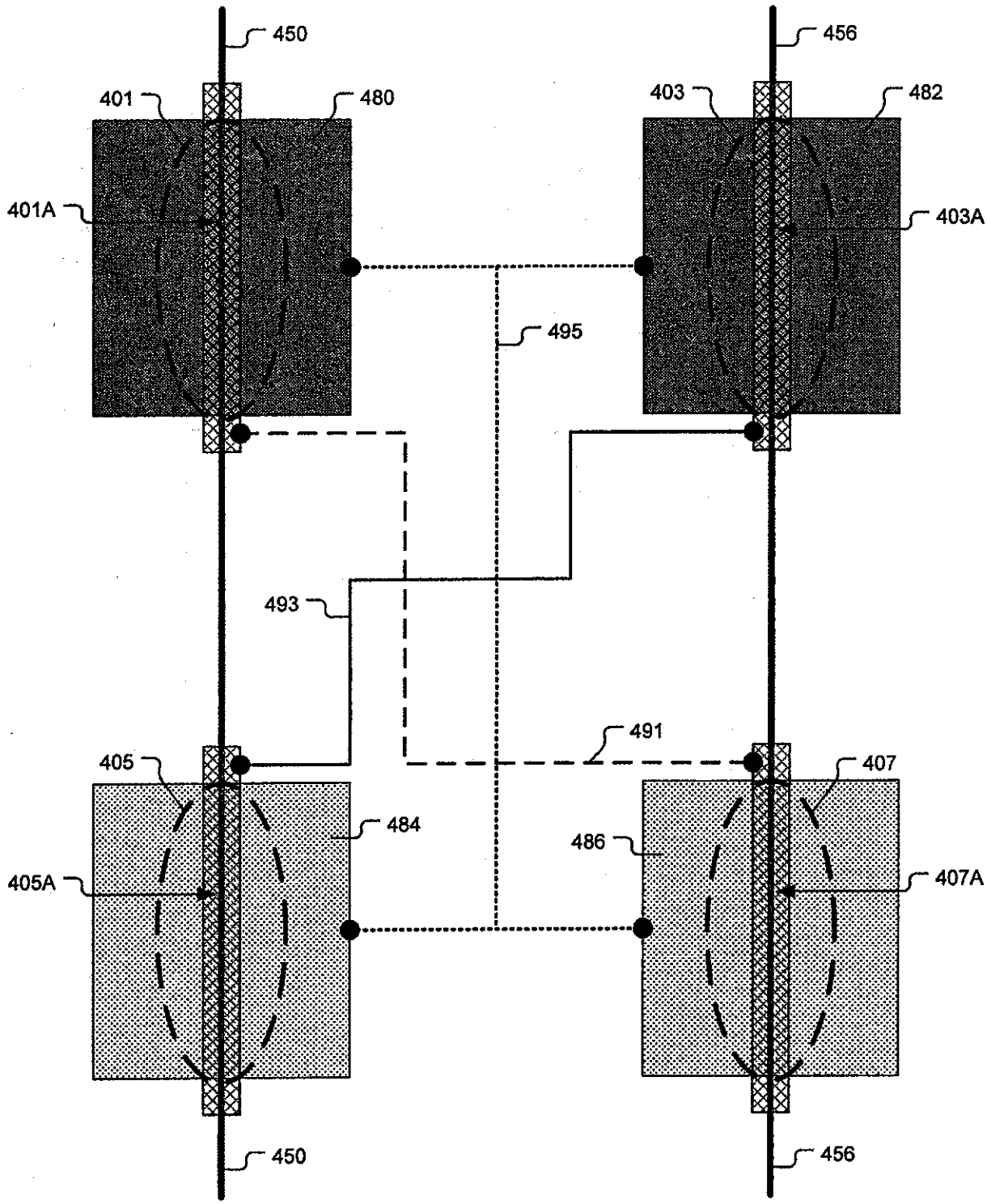

450
456
401
480
403
482
401A
403A
495
493
491
405
407
484
486
405A
407A
450
456

Fig. 4

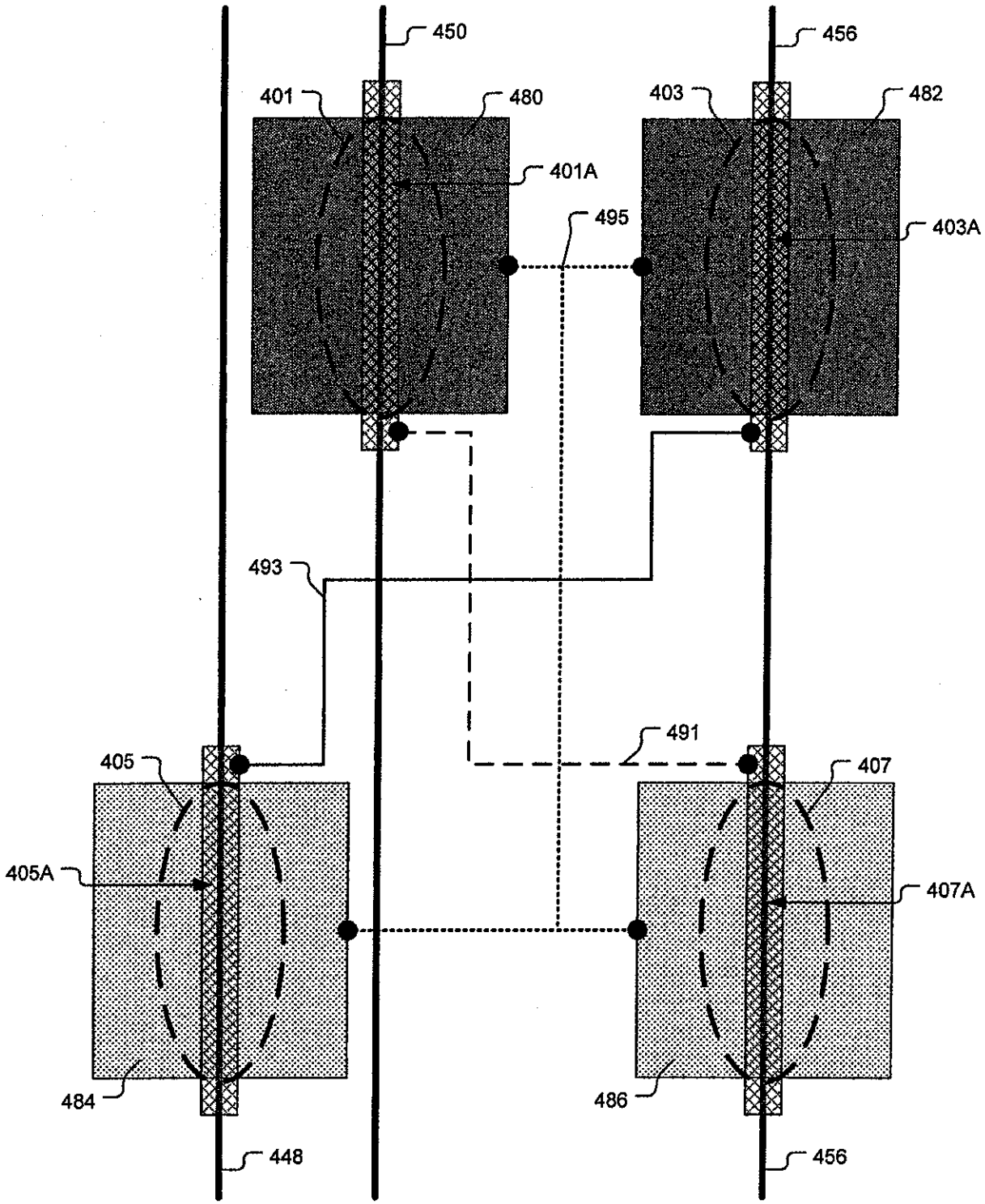

450
456
401
480
403
482
401A
495
403A
493
491
405
407
405A
407A
484
486
448
456

Fig. 5

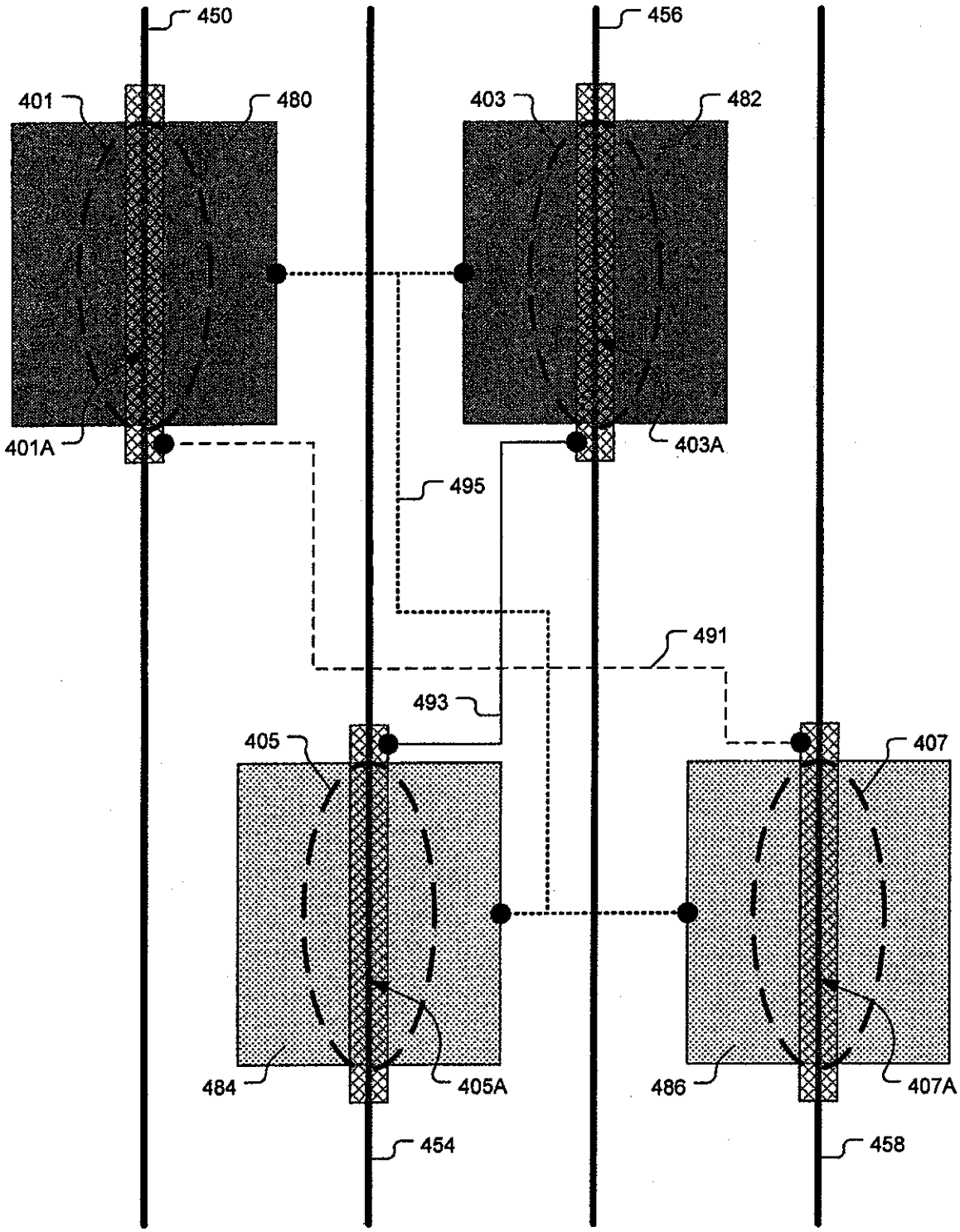

450
456
401
480
403
482
401A
403A
495
491
493
405
407
484
405A
486
407A
454
458

Fig. 6

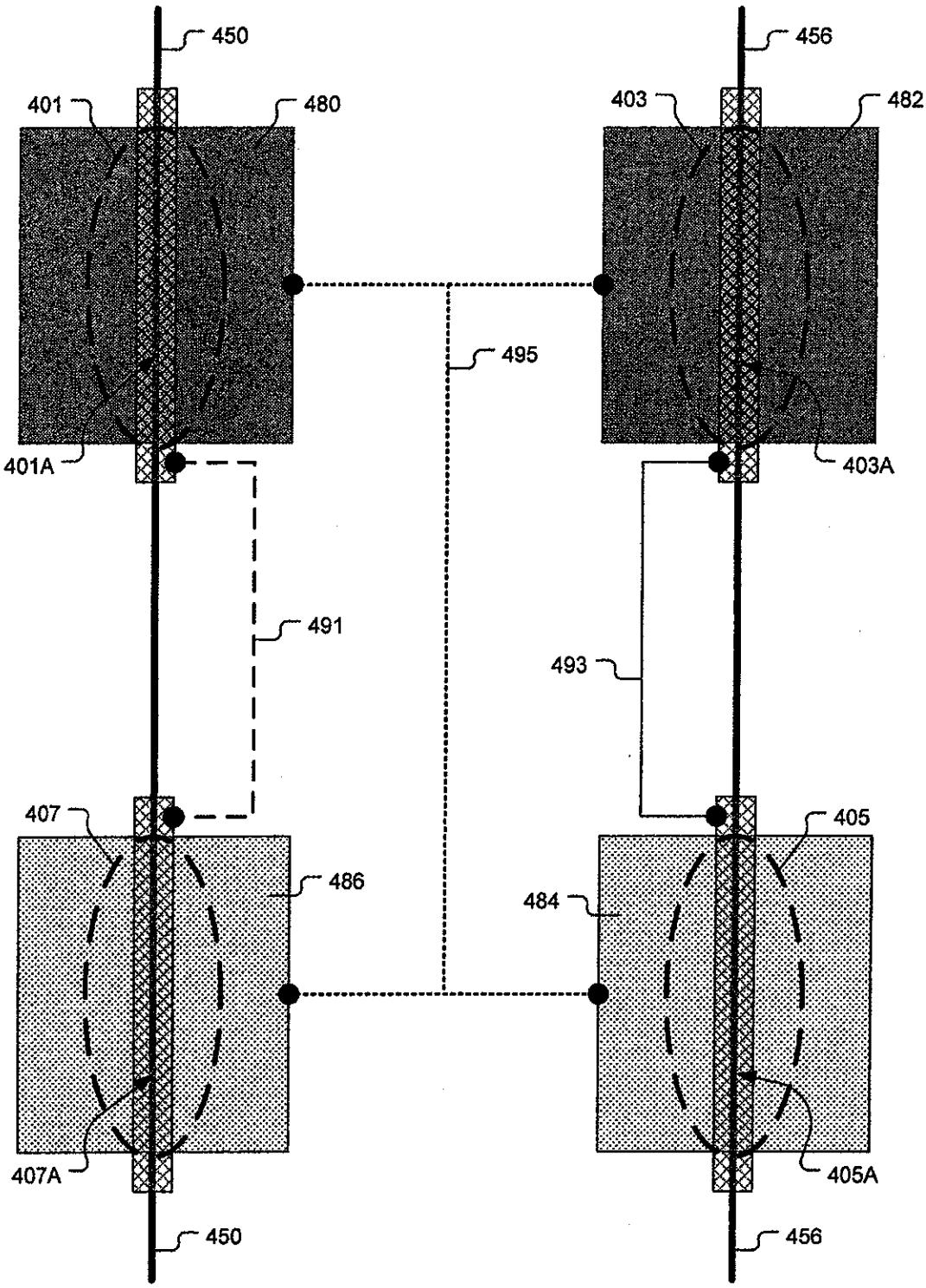

450
401
480
456
403
482
495
401A
403A
491
493
407
405
486
484
407A
405A
450
456

Fig. 7

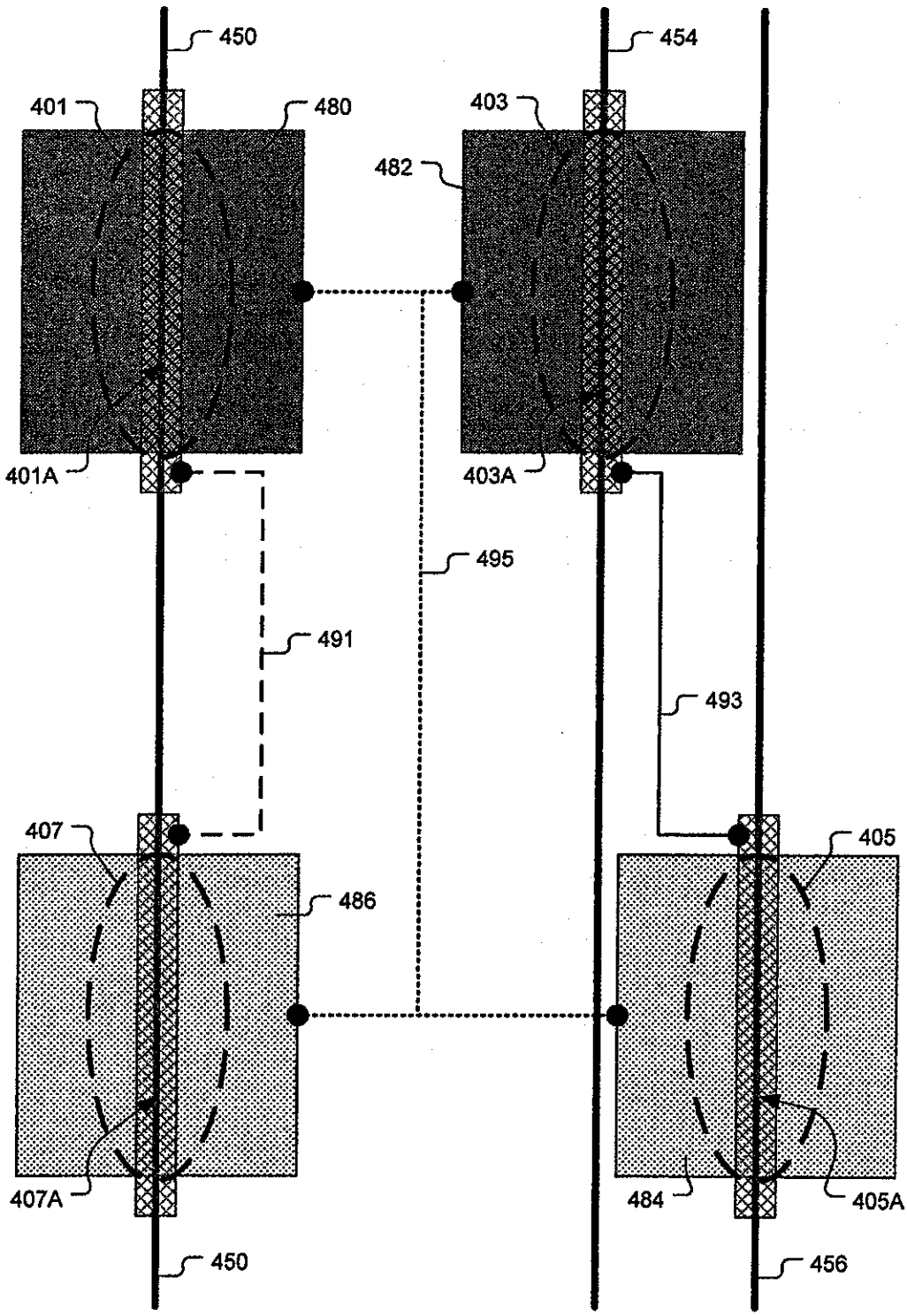

450
454
401
480
403
482
401A
403A
495
491
493
407
405
486
407A
484
405A
450
456

Fig. 8

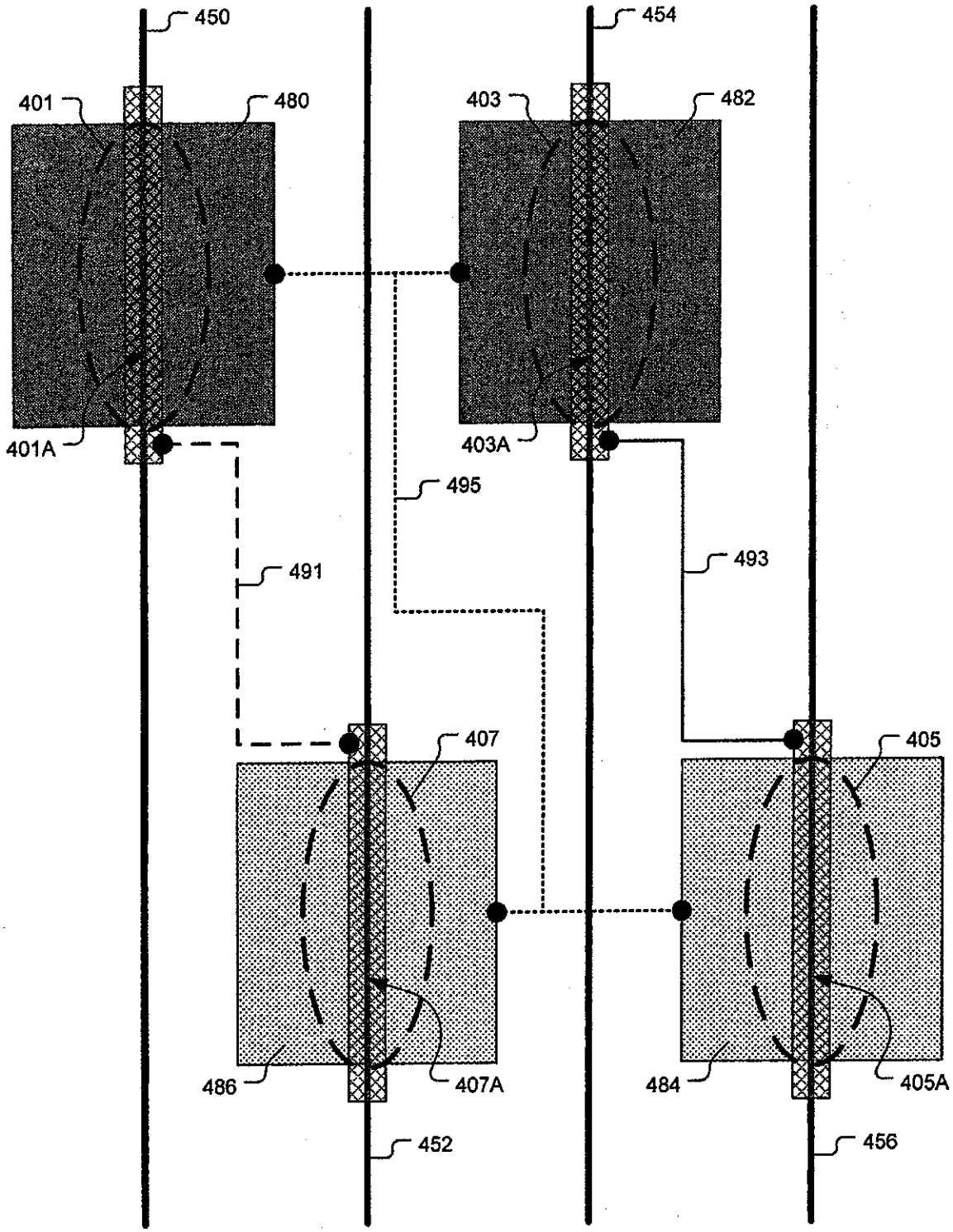

450
454
401
480
403
482
401A
403A
495
491
493
407
405
486
407A
484
405A
452
456

Fig. 9

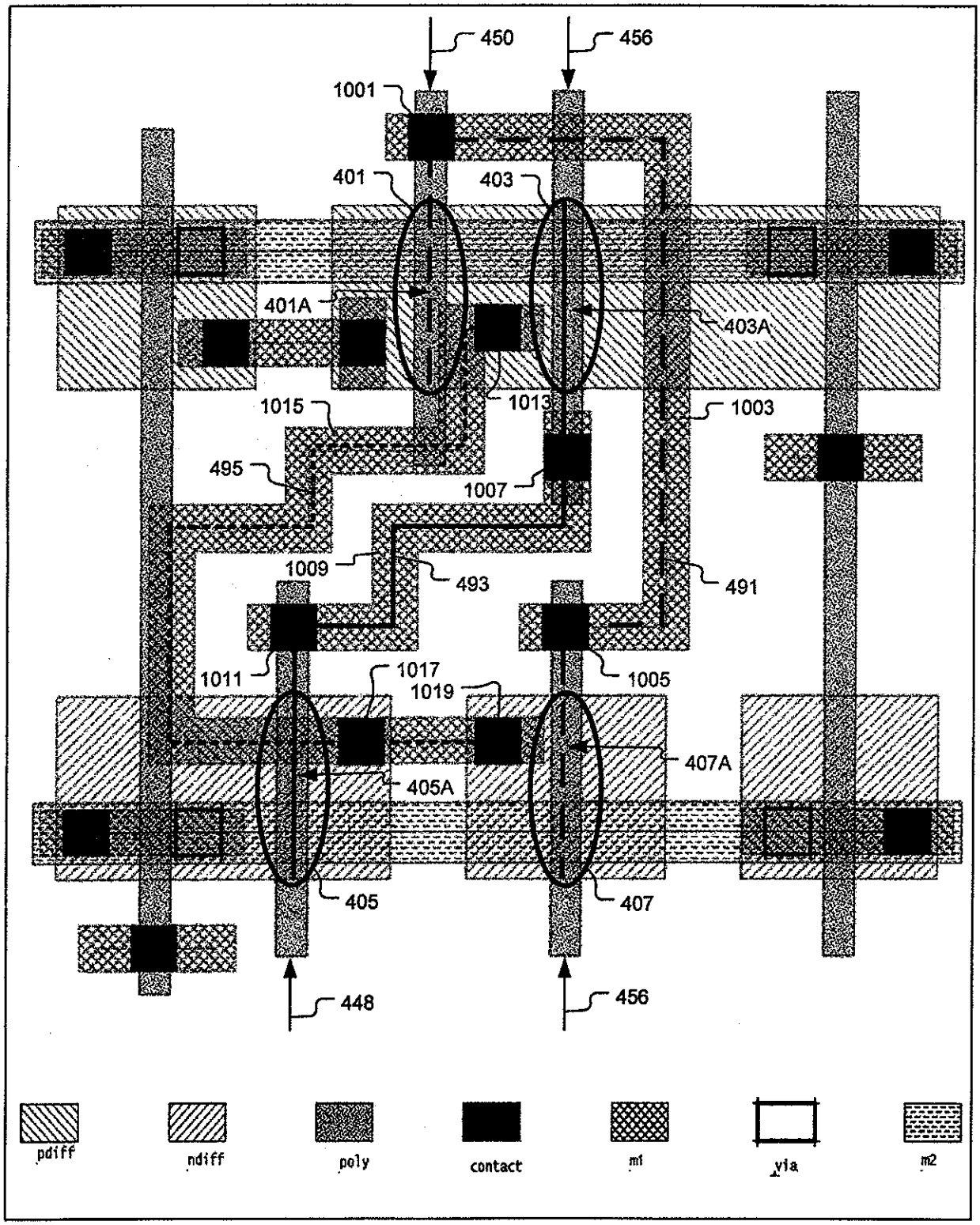

450
456
1001
401
403
401A
403A
1015
1013
1003
495
1007
1009
493
491
1011
1017
1019
1005
407A
405A
405
407
448
456
pdiff
ndiff
poly
contact
m1
via
m2

Fig. 10

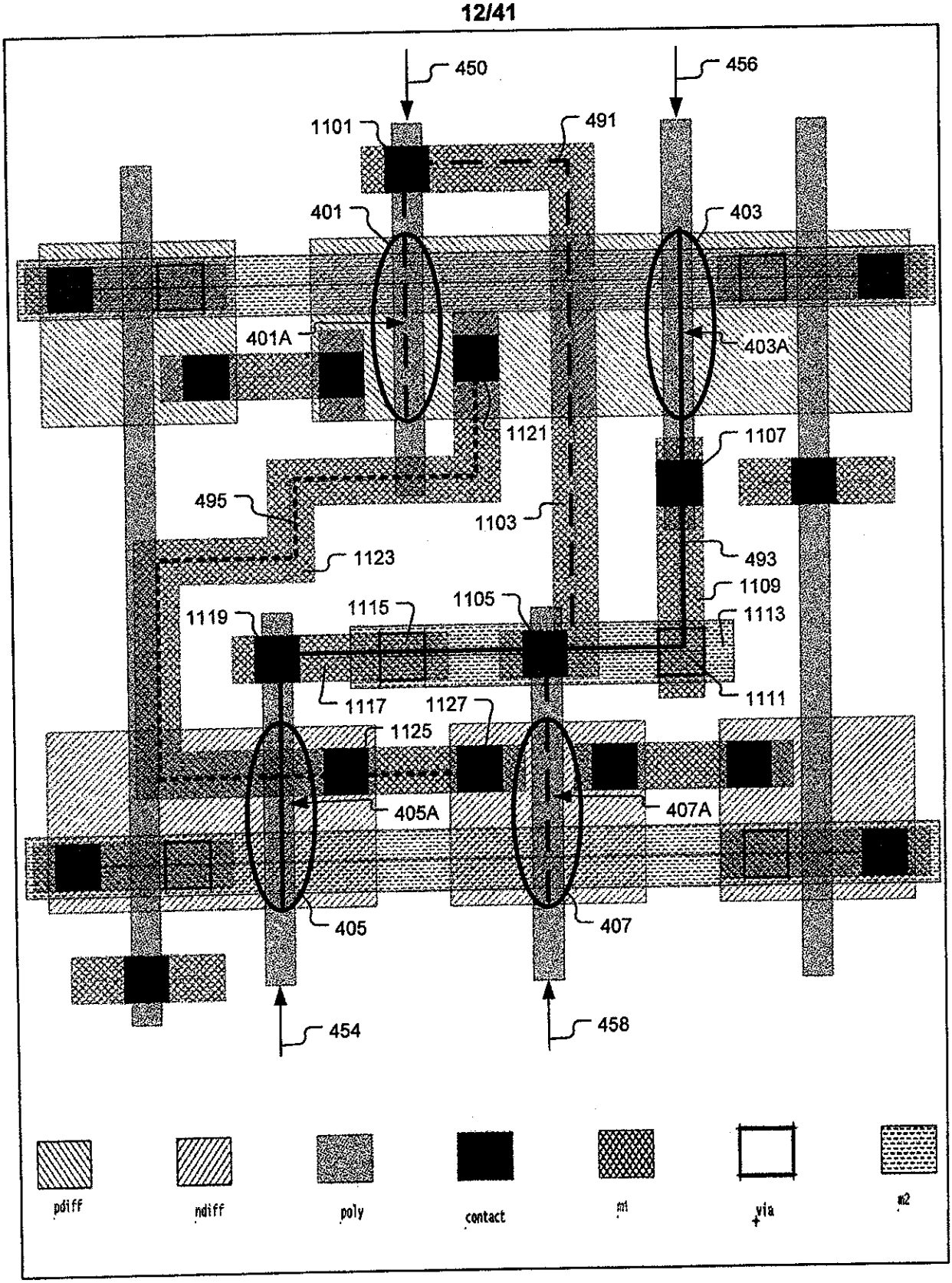

450
456
1101
491
401
403
401A
403A
1121
1107
495
1103
493
1123
1109
1105
1115
1113
1119
1111
1117
1127
1125
405A
407A
405
407
454
458
pdiff
ndiff
poly
contact
m1
via
m2

Fig. 11

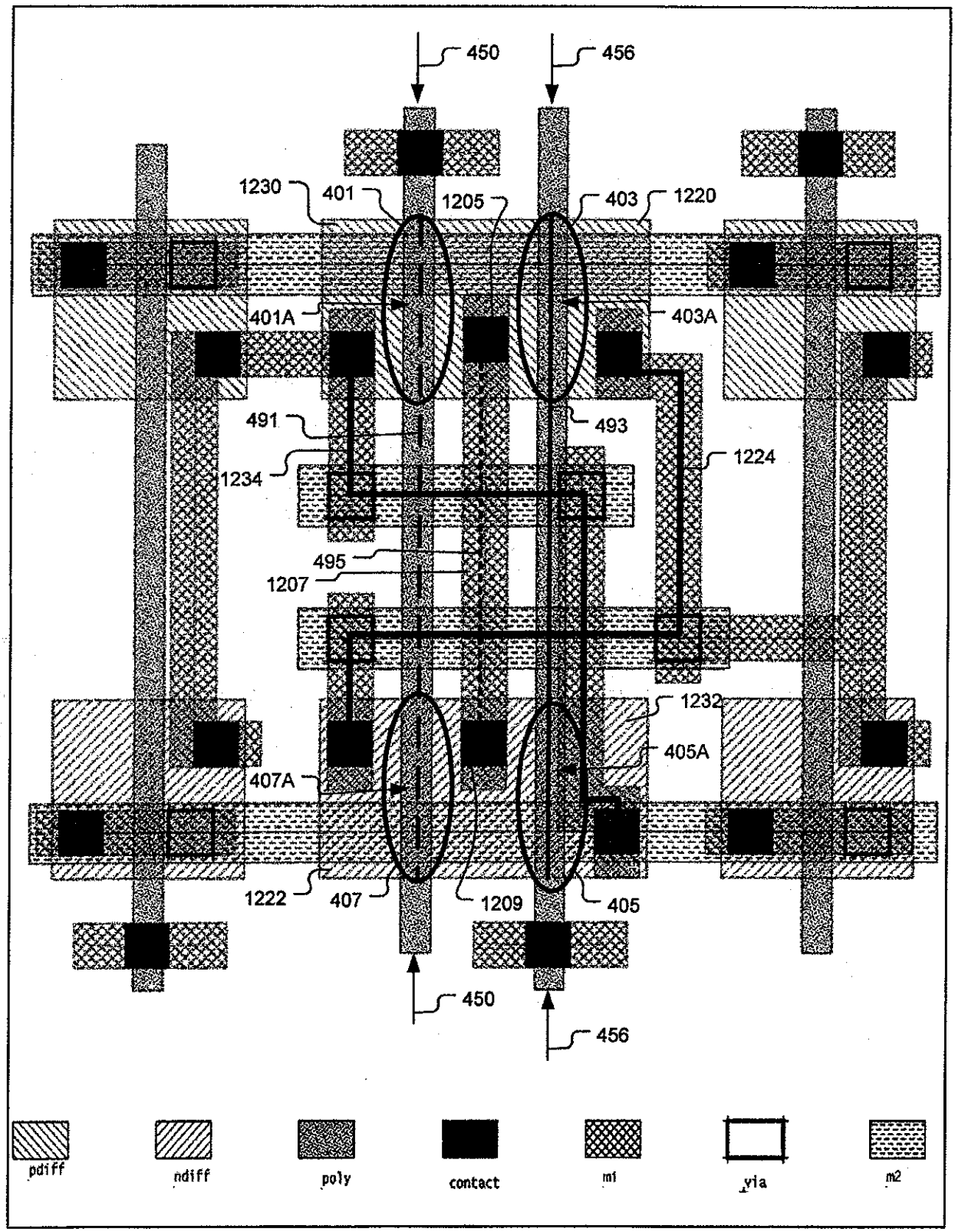

450
456
1230
401
1205
403
1220
401A
403A
491
493
1234
1224
495
1207
1232
405A
407A
1222
407
1209
405
450
456
pdiff
ndiff
poly
contact
m1
via
m2

Fig. 12

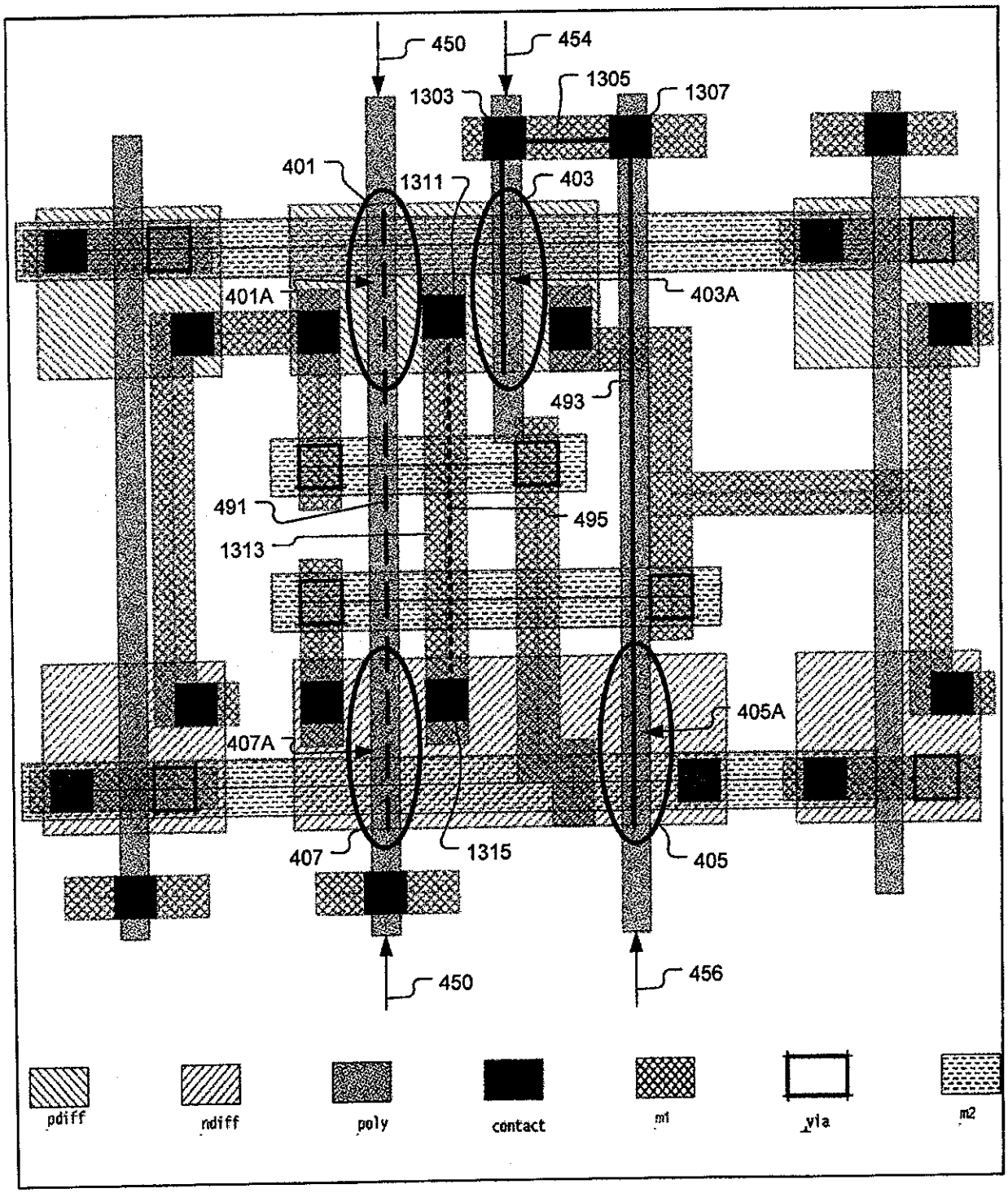

450
454
1303
1305
1307
401
1311
403
401A
403A
493
491
495
1313
405A
407A
407
1315
405
450
456
pdiff
ndiff
poly
contact
m1
via
m2

Fig. 13

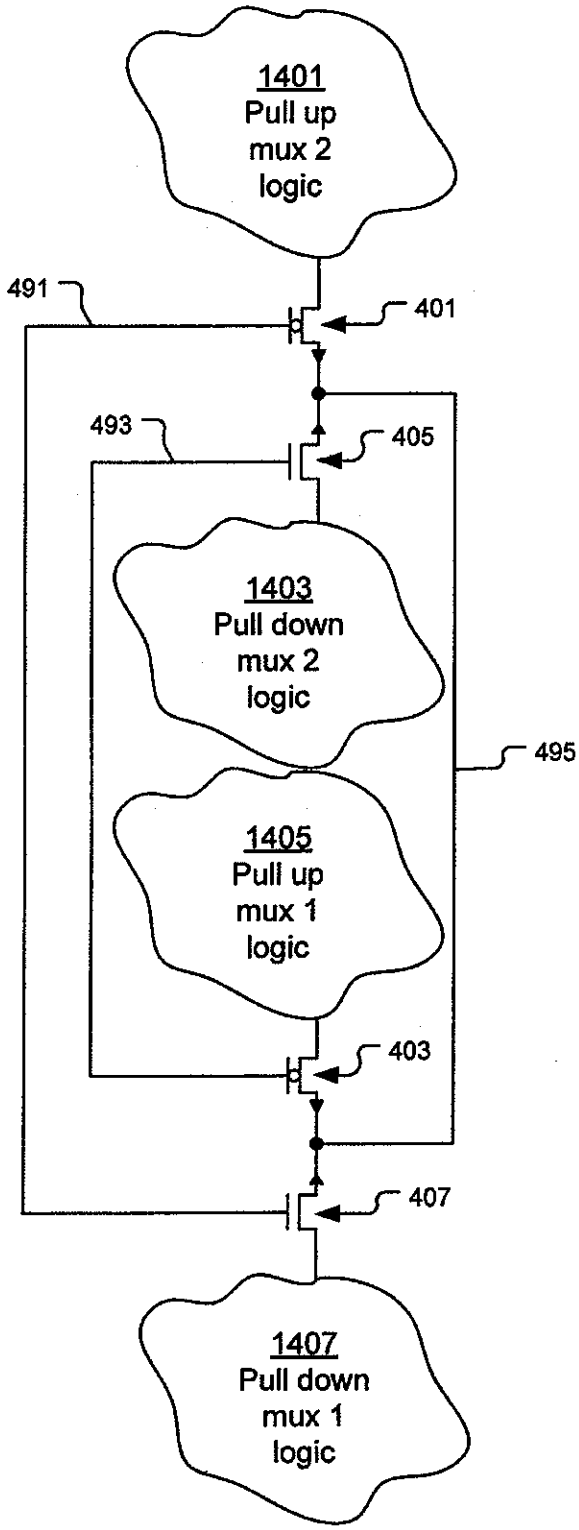

1401
Pull up
mux 2
logic
491
401
493
405
1403
Pull down
mux 2
logic
495
1405
Pull up
mux 1
logic
403
407
1407
Pull down
mux 1
logic

Fig. 14A

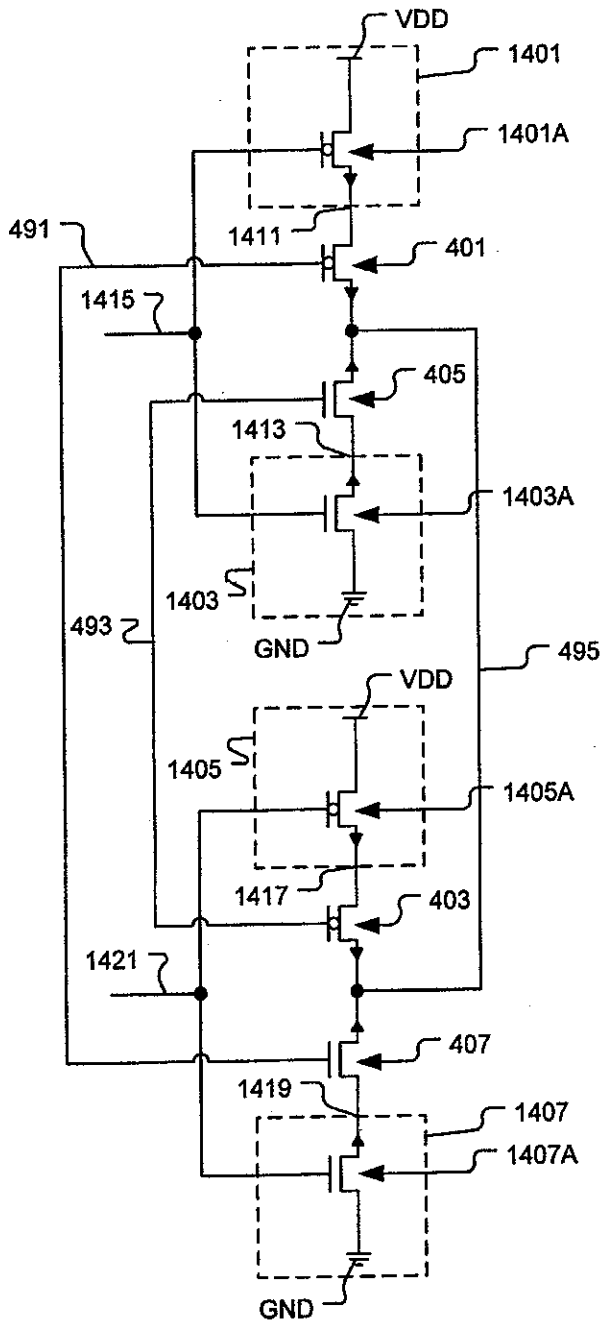

VDD
1401
1401A
491
1411
401
1415
405
1413
1403A
1403
493
GND
495
VDD
1405
1405A
1417
403
1421
407
1419
1407
1407A
GND

Fig. 14B

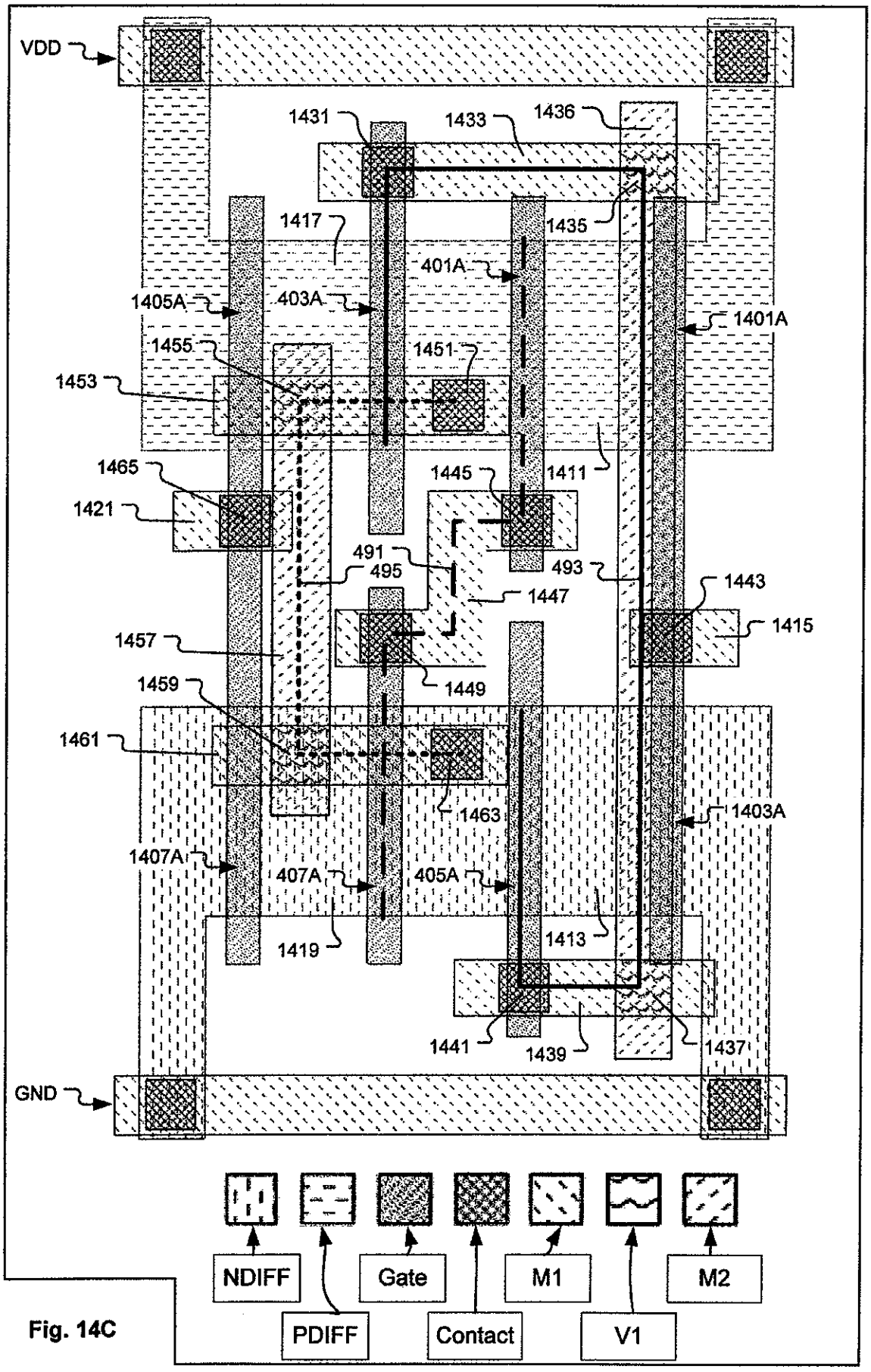

VDD
1431
1433
1436
1435
1417
401A
1405A
403A
1401A
1455
1451
1453
1465
1445
1411
1421
491
495
493
1443
1447
1415
1457
1449
1459
1461
1463
1403A
1407A
407A
405A
1413
1419
1441
1439
1437
GND
NDIFF
Gate
M1
M2
PDIFF
Contact
V1

Fig. 14C

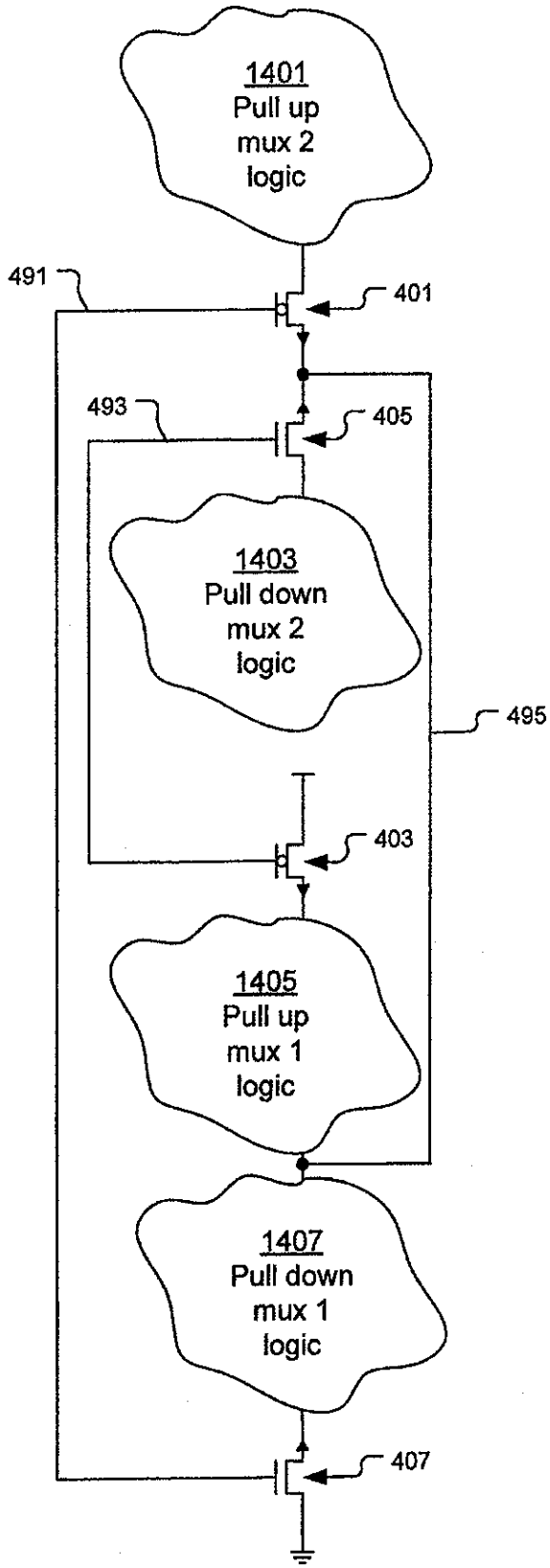

1401
Pull up
mux 2
logic
491
401
493
405
1403
Pull down
mux 2
logic
495
403
1405
Pull up
mux 1
logic
1407
Pull down
mux 1
logic
407

Fig. 15A

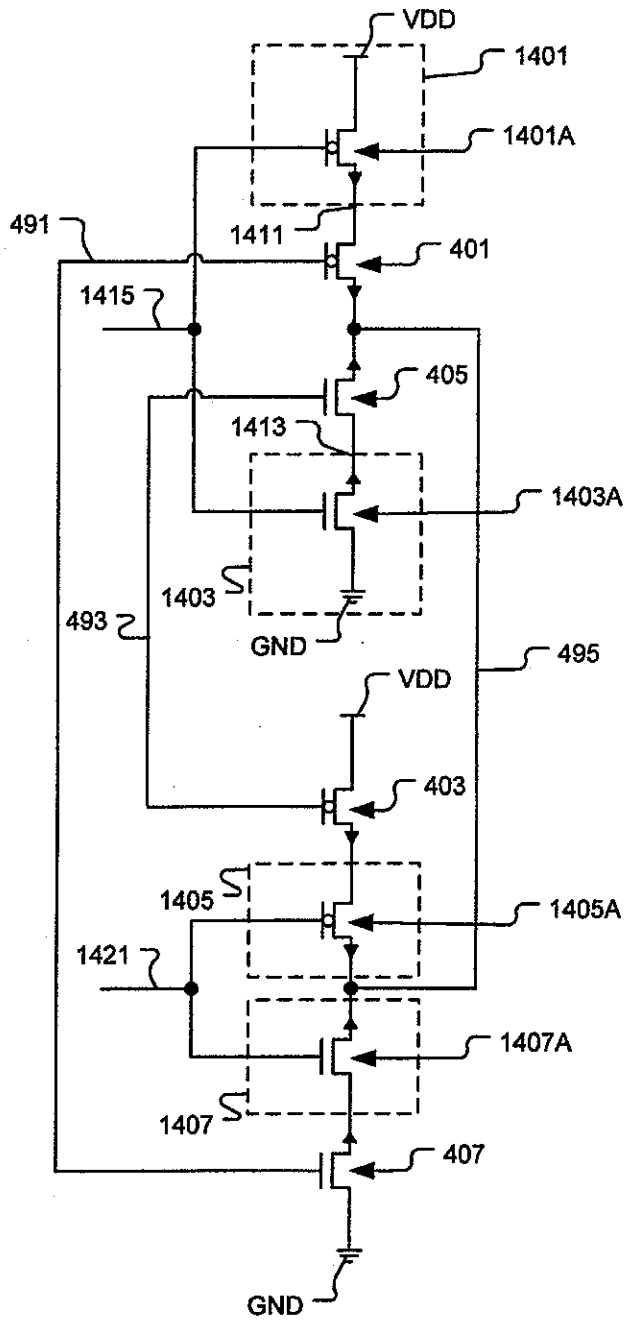

VDD
1401
1401A
491
1411
401
1415
405
1413
1403A
1403
493
GND
495
VDD
403
1405
1405A
1421
1407A
1407
407
GND

Fig. 15B

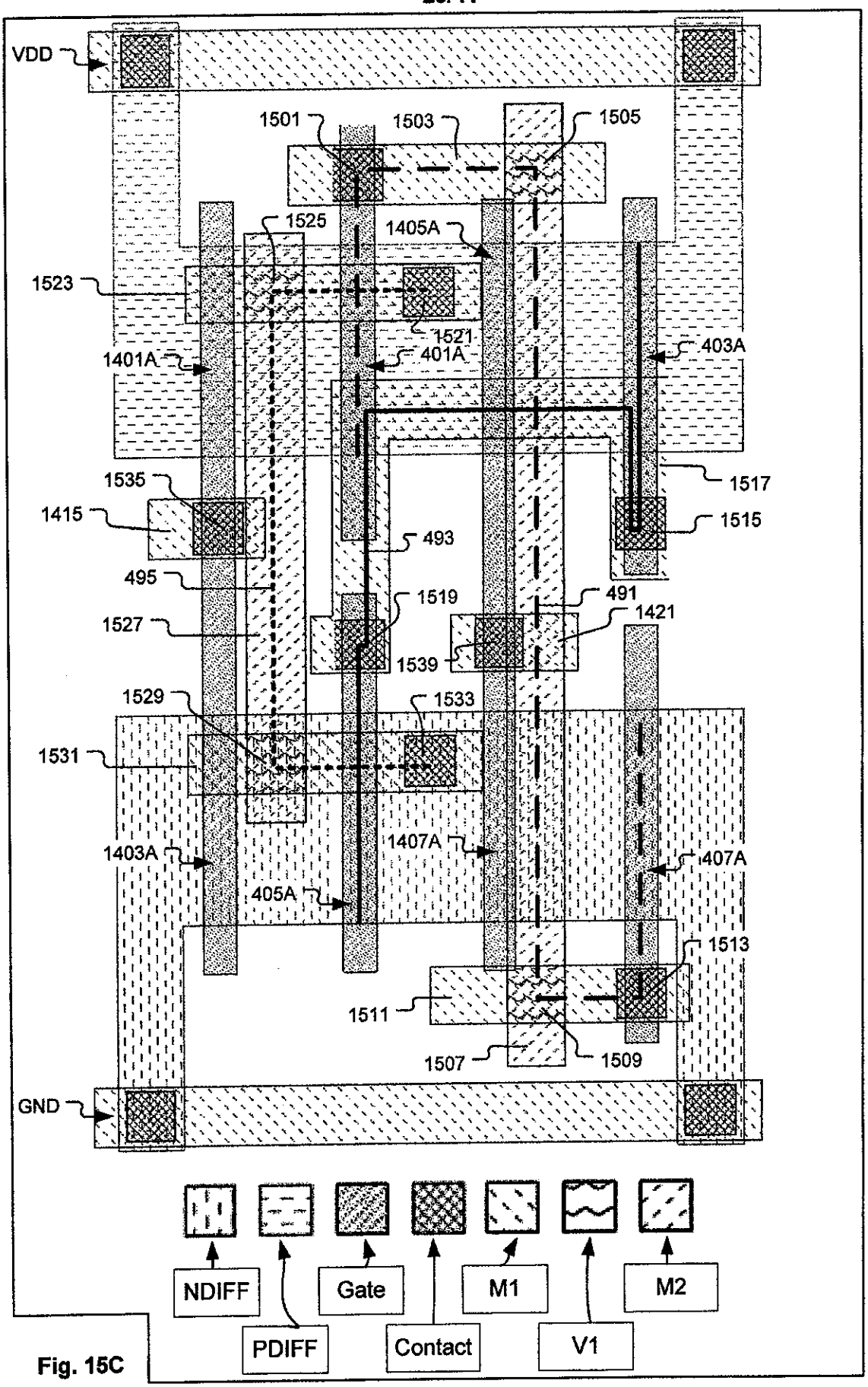

VDD
1501
1503
1505
1525
1405A
1523
1521
1401A
401A
403A
1535
1517
1415
1515
493
495
1519
491
1527
1421
1539
1529
1533
1531
1403A
1407A
407A
405A
1513
1511
1507
1509
GND
NDIFF
PDIFF
Gate
Contact
M1
V1
M2

Fig. 15C

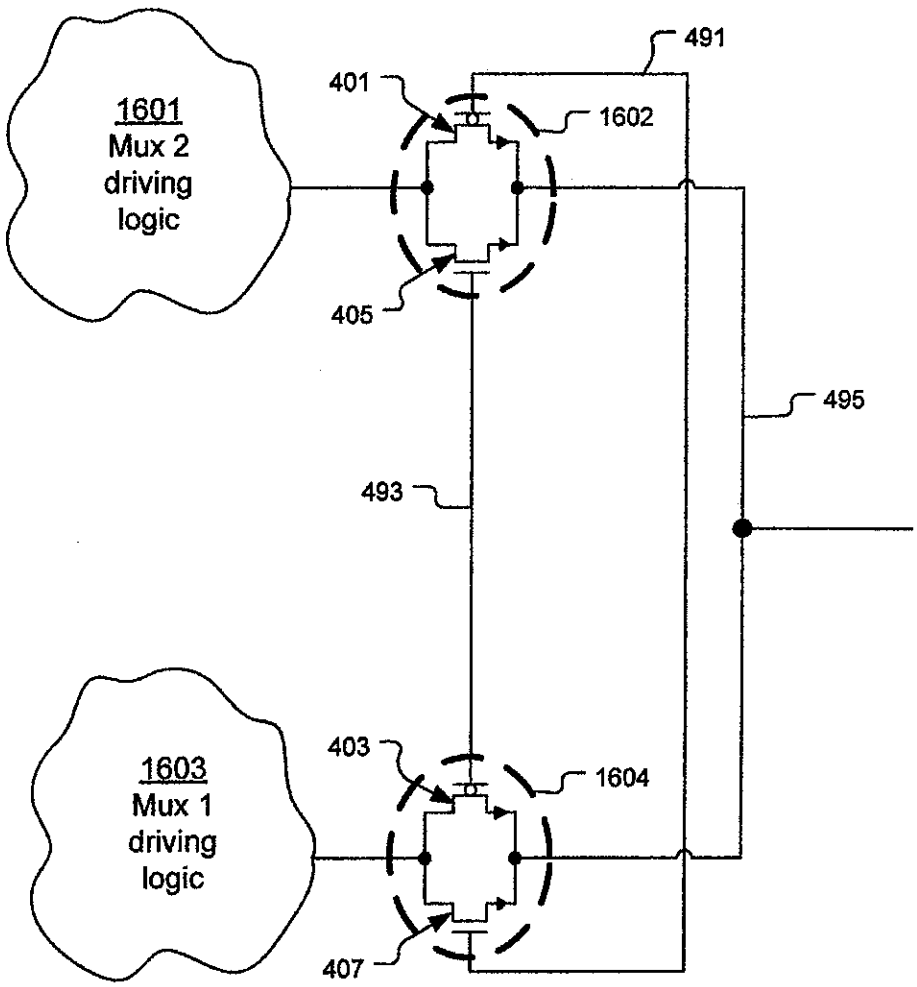

1601
Mux 2
driving
logic
401
491
1602
405
495
493
1603
Mux 1
driving
logic
403
1604
407

Fig. 16A

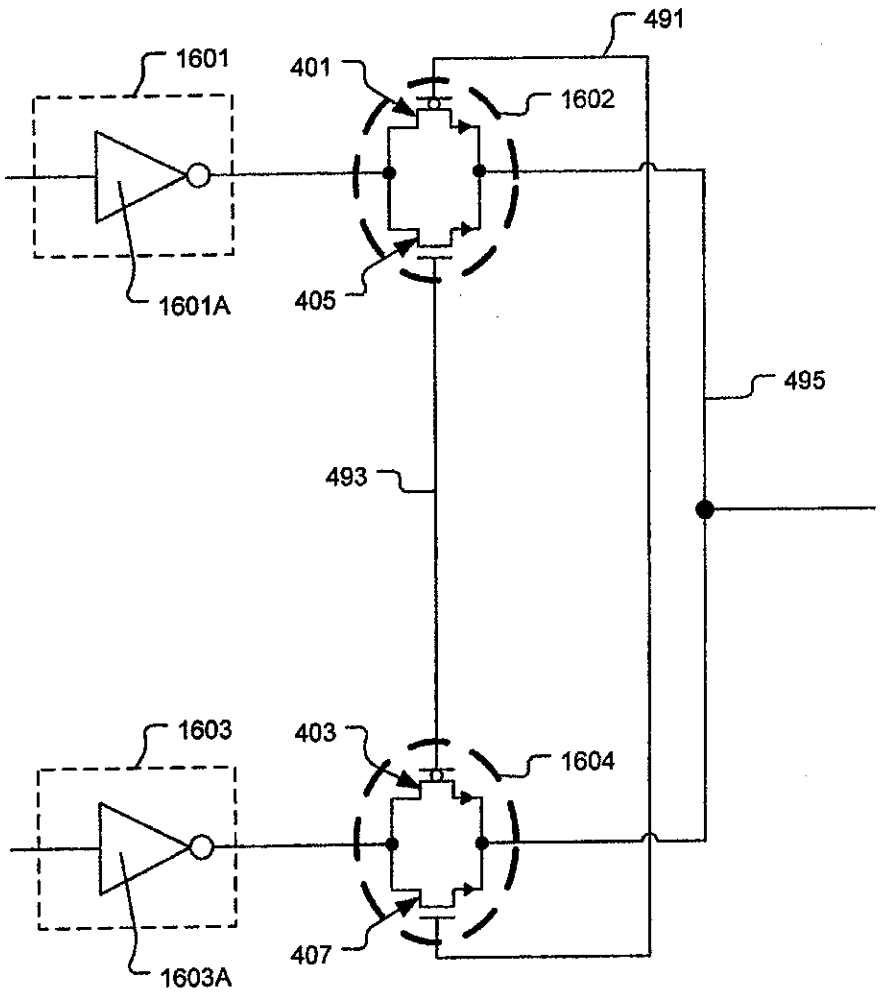


Fig. 16B

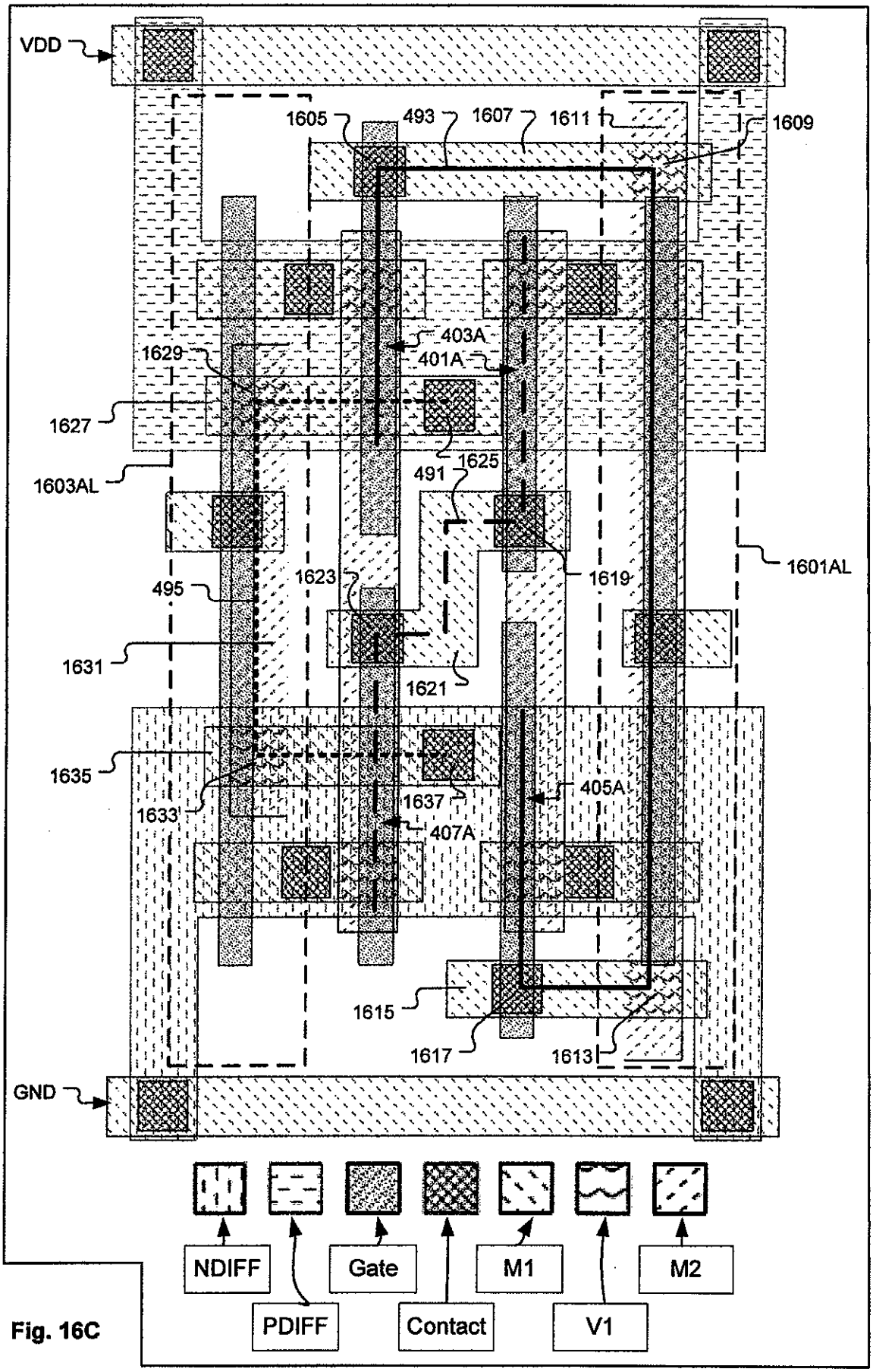

VDD
1605
493
1607
1611
1609
403A
401A
1629
1627
1625
491
1603AL
1601AL
1619
1623
495
1631
1621
1635
405A
1637
1633
407A
1615
1617
1613
GND
NDIFF
Gate
M1
M2
PDIFF
Contact
V1

Fig. 16C

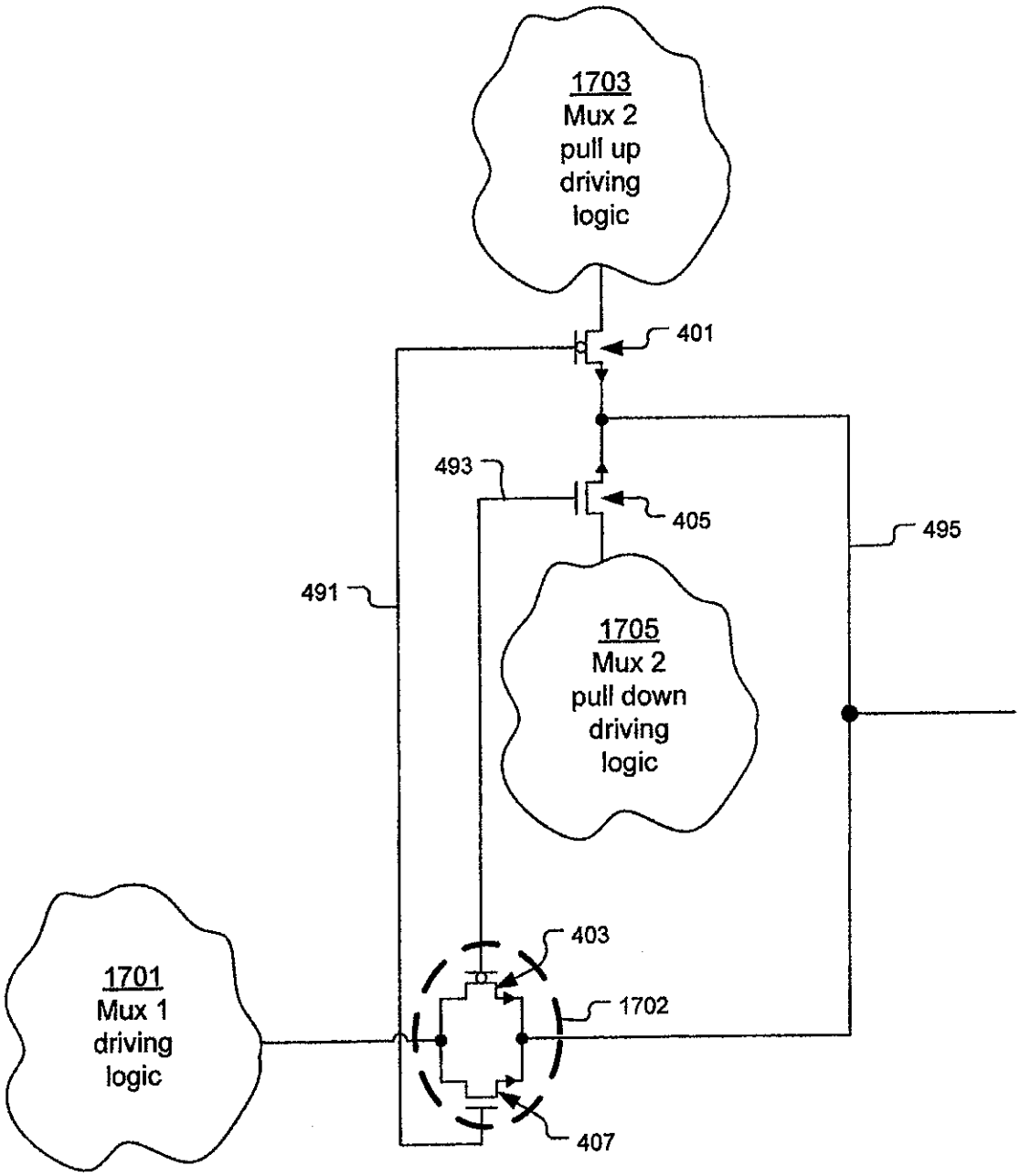

1703
Mux 2
pull up
driving
logic
401
493
405
495
491
1705
Mux 2
pull down
driving
logic
1701
Mux 1
driving
logic
403
1702
407

Fig. 17A

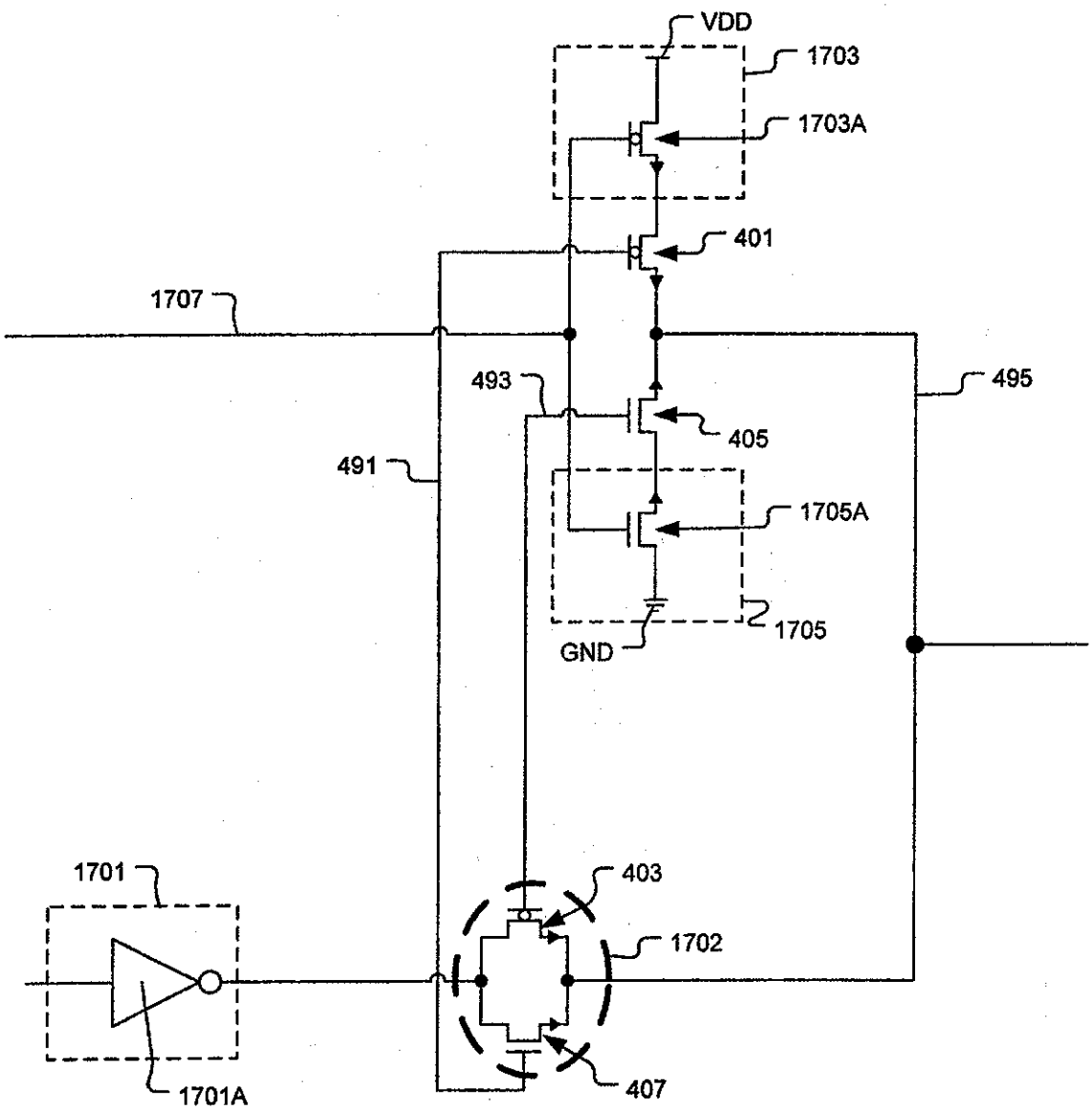

VDD
1703
1703A
401
1707
493
495
405
491
1705A
1705
GND
1701
403
1702
407
1701A

Fig. 17B

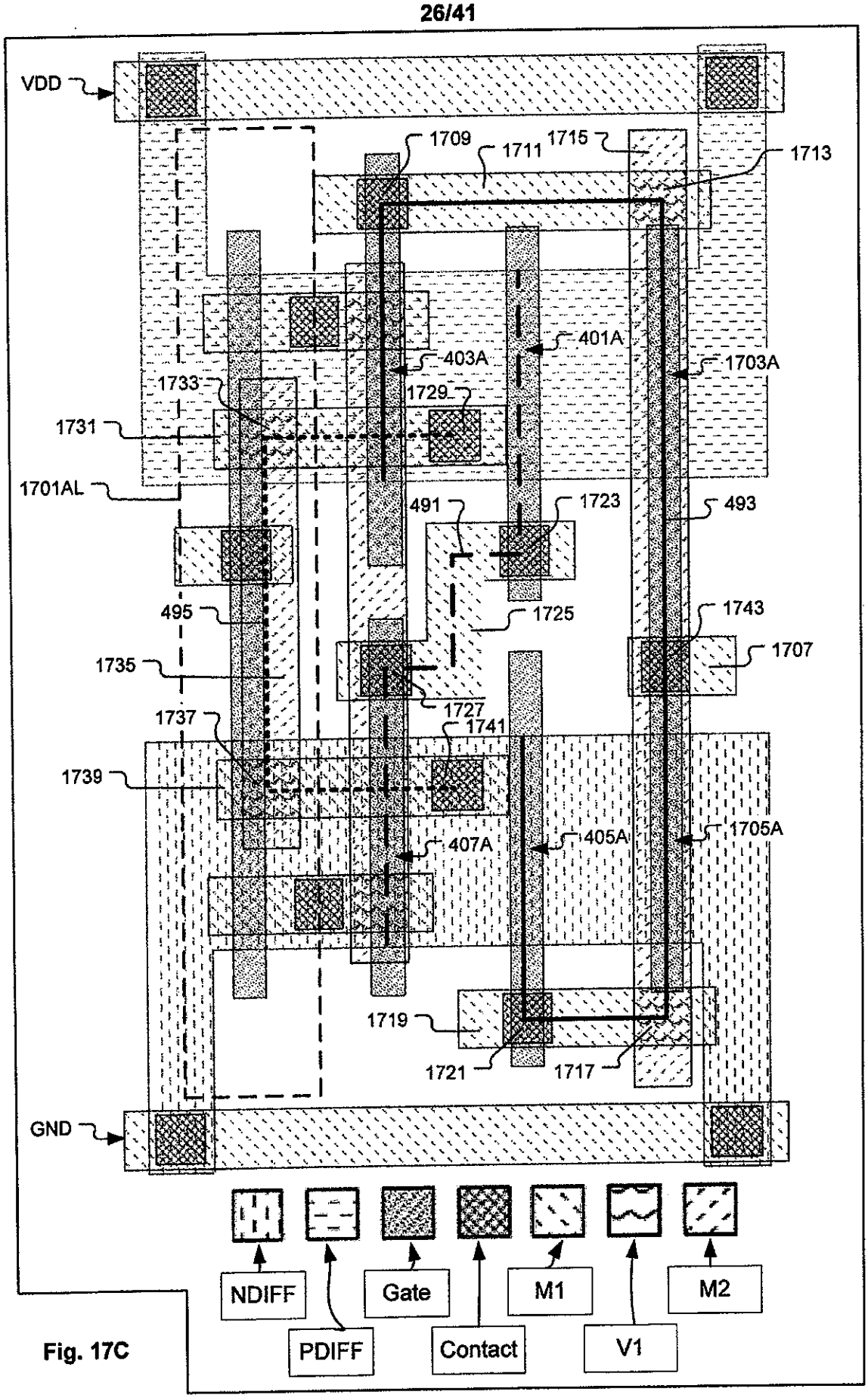

VDD
1709
1711
1715
1713
401A
403A
1703A
1733
1729
1731
1701AL
491
1723
493
495
1725
1743
1735
1707
1727
1737
1741
1739
405A
407A
1705A
1719
1721
1717
GND
NDIFF
PDIFF
Gate
Contact
M1
V1
M2

Fig. 17C

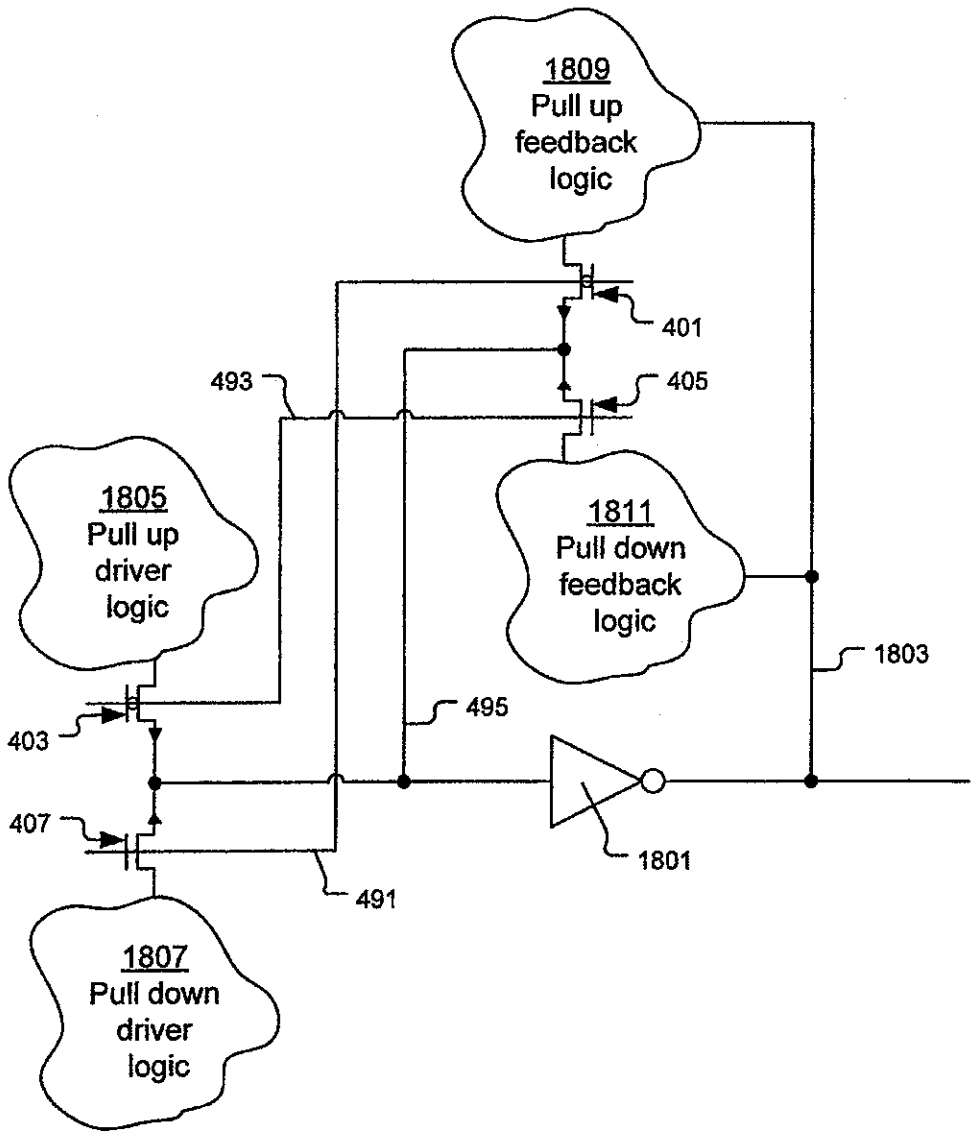

1809
Pull up
feedback
logic
401
493
405
1805
Pull up
driver
logic
1811
Pull down
feedback
logic
1803
403
495
407
1801
491
1807
Pull down
driver
logic

Fig. 18A

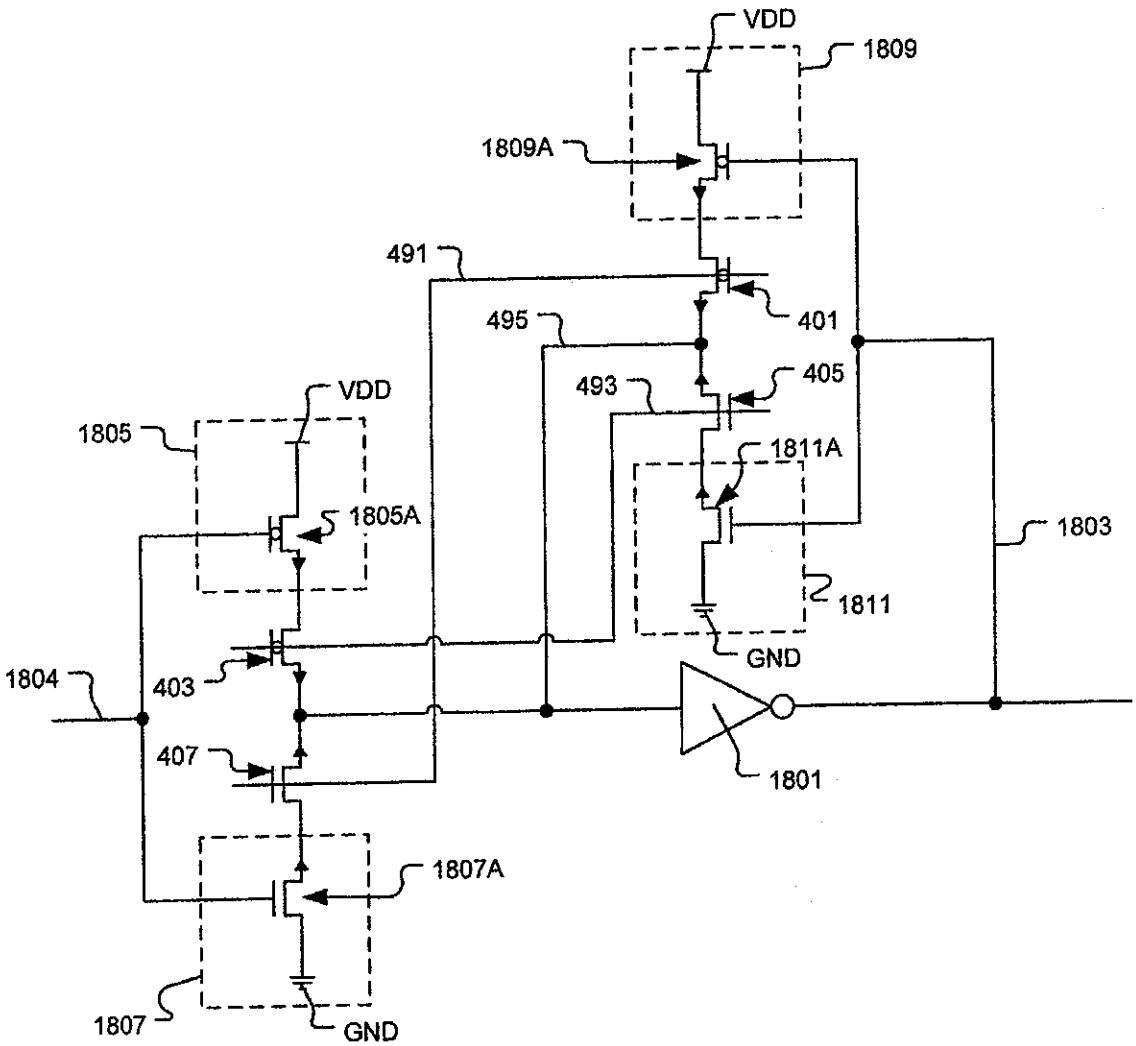

VDD
1809
1809A
491
401
495
405
493
VDD
1805
1811A
1805A
1803
1811
GND
1804
403
407
1801
1807A
1807
GND

Fig. 18B

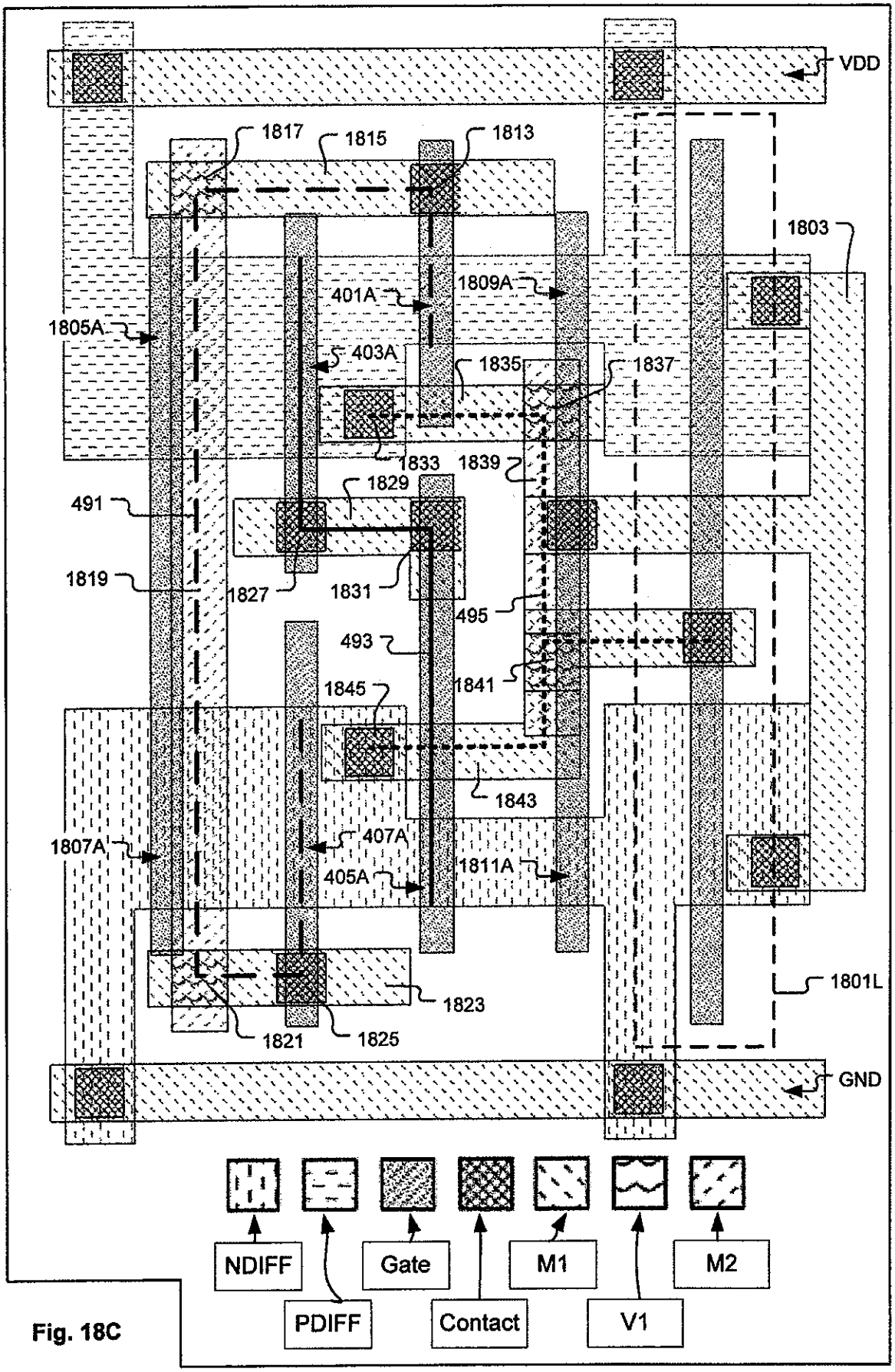

VDD
1817
1815
1813
1803
1809A
401A
1805A
403A
1835
1837
1833
1839
1829
491
1819
1827
1831
495
493
1841
1845
1843
1807A
407A
1811A
405A
1823
1801L
1821
1825
GND
NDIFF
Gate
M1
M2
PDIFF
Contact
V1

Fig. 18C

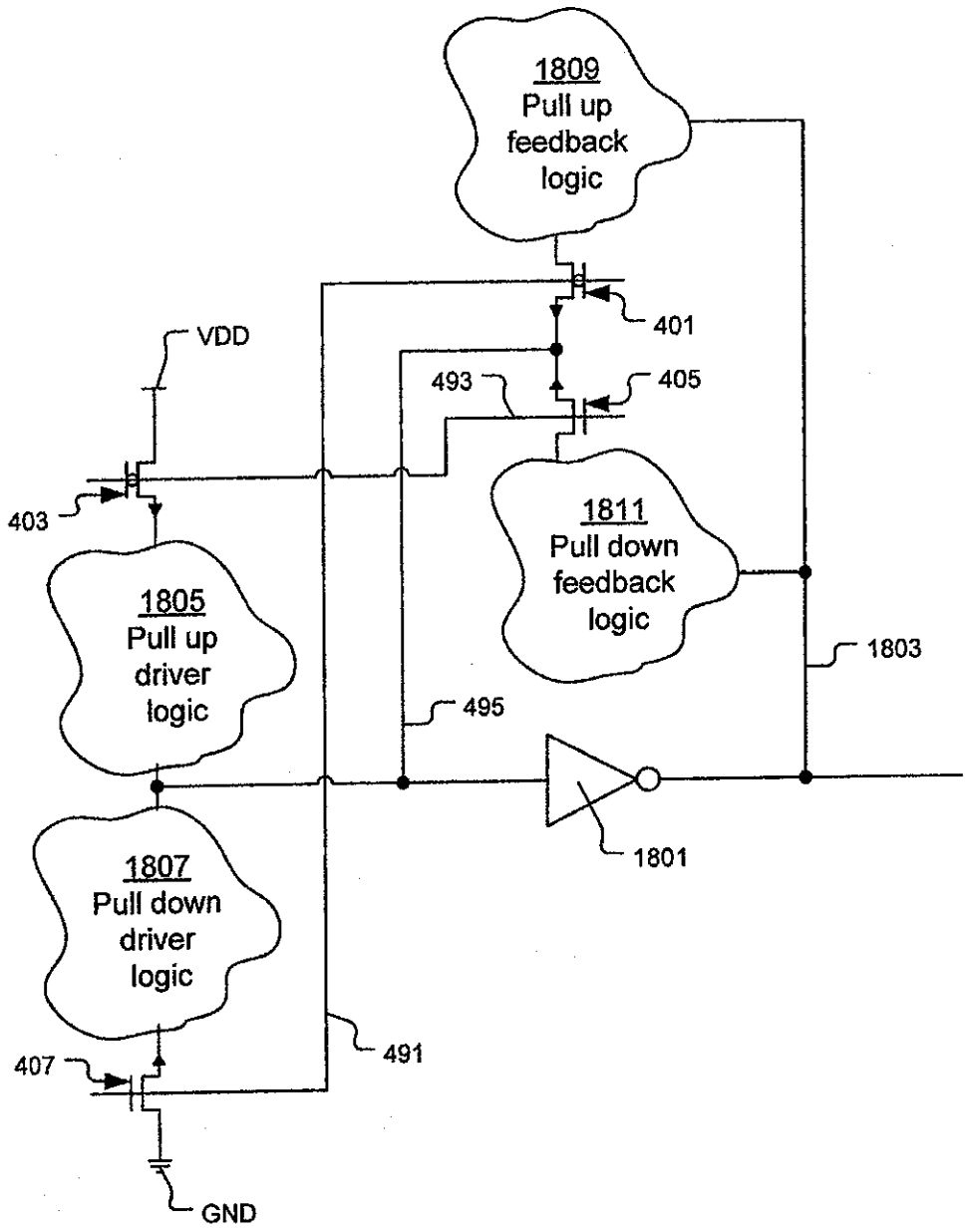

1809
Pull up
feedback
logic
401
VDD
493
405
403
1811
Pull down
feedback
logic
1805
Pull up
driver
logic
1803
495
1801
1807
Pull down
driver
logic
491
407
GND

Fig. 19A

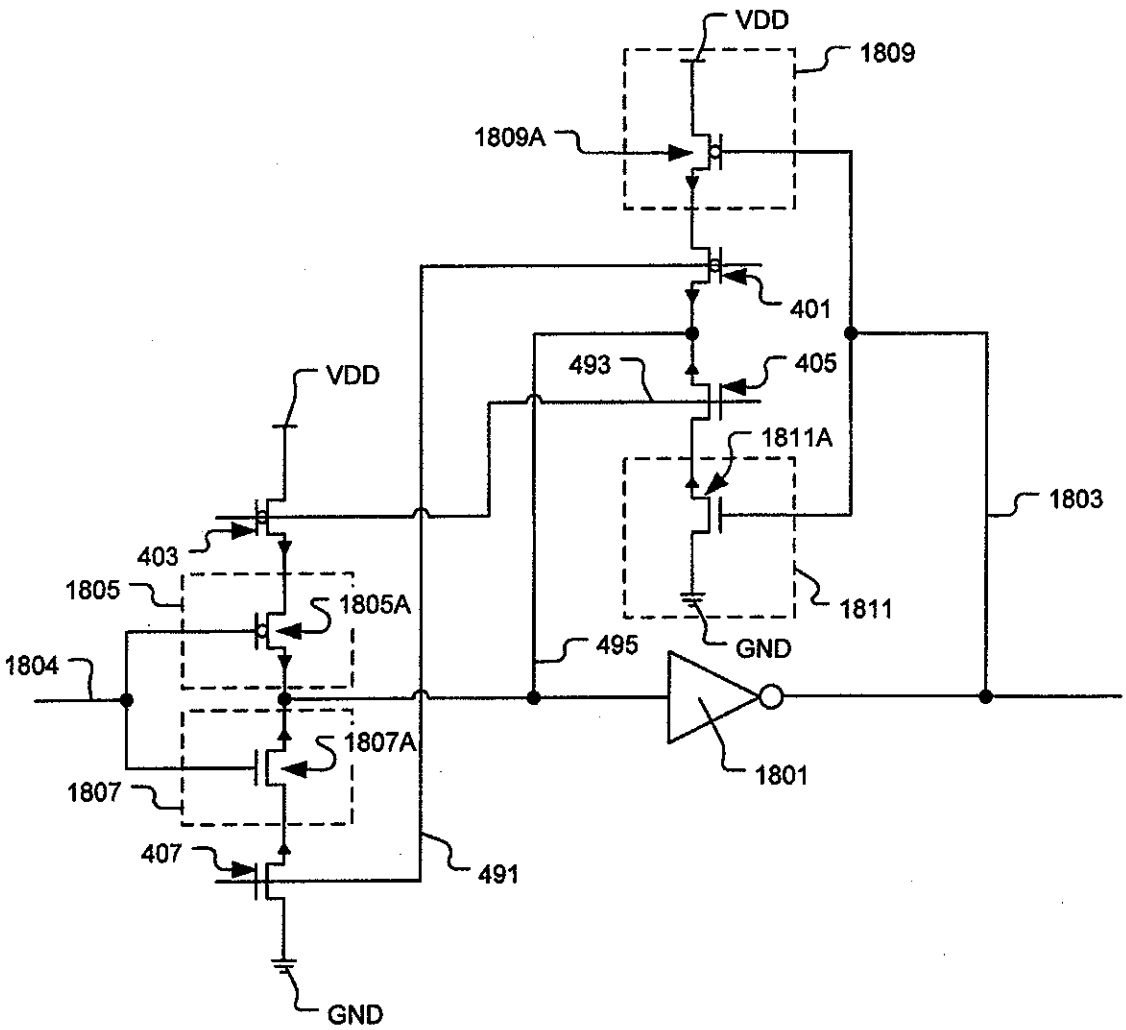

VDD
1809
1809A
401
VDD
493
405
1811A
1803
403
1805
1805A
1804
1811
GND
495
1807A
1801
1807
407
491
GND

Fig. 19B

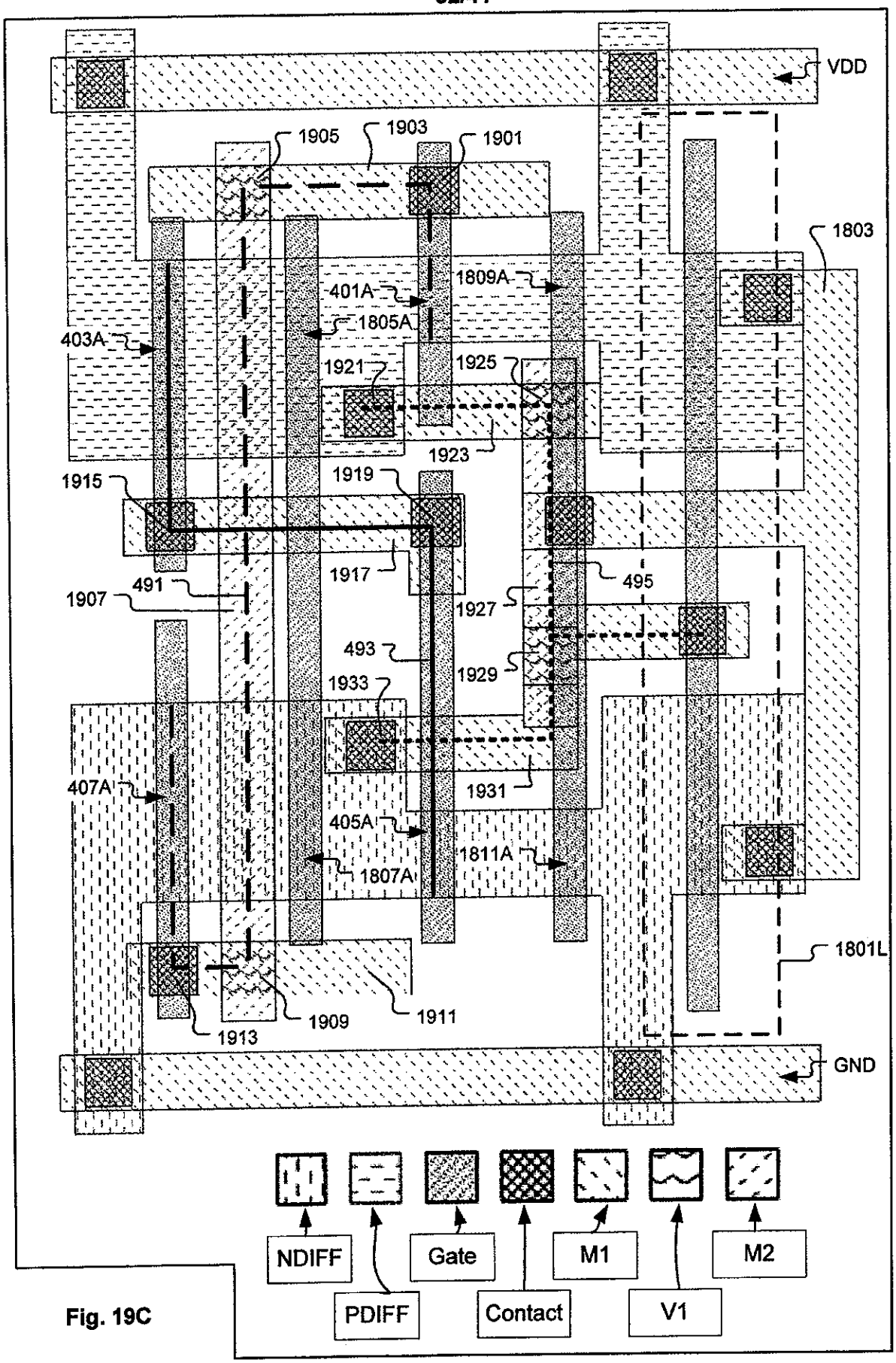

VDD
1905
1903
1901
1803
1809A
401A
1805A
403A
1921
1925
1923
1919
1915
1917
495
491
1907
1927
493
1929
1933
1931
407A
405A
1811A
1807A
1801L
1909
1911
1913
GND
NDIFF
Gate
M1
M2
PDIFF
Contact
V1

Fig. 19C

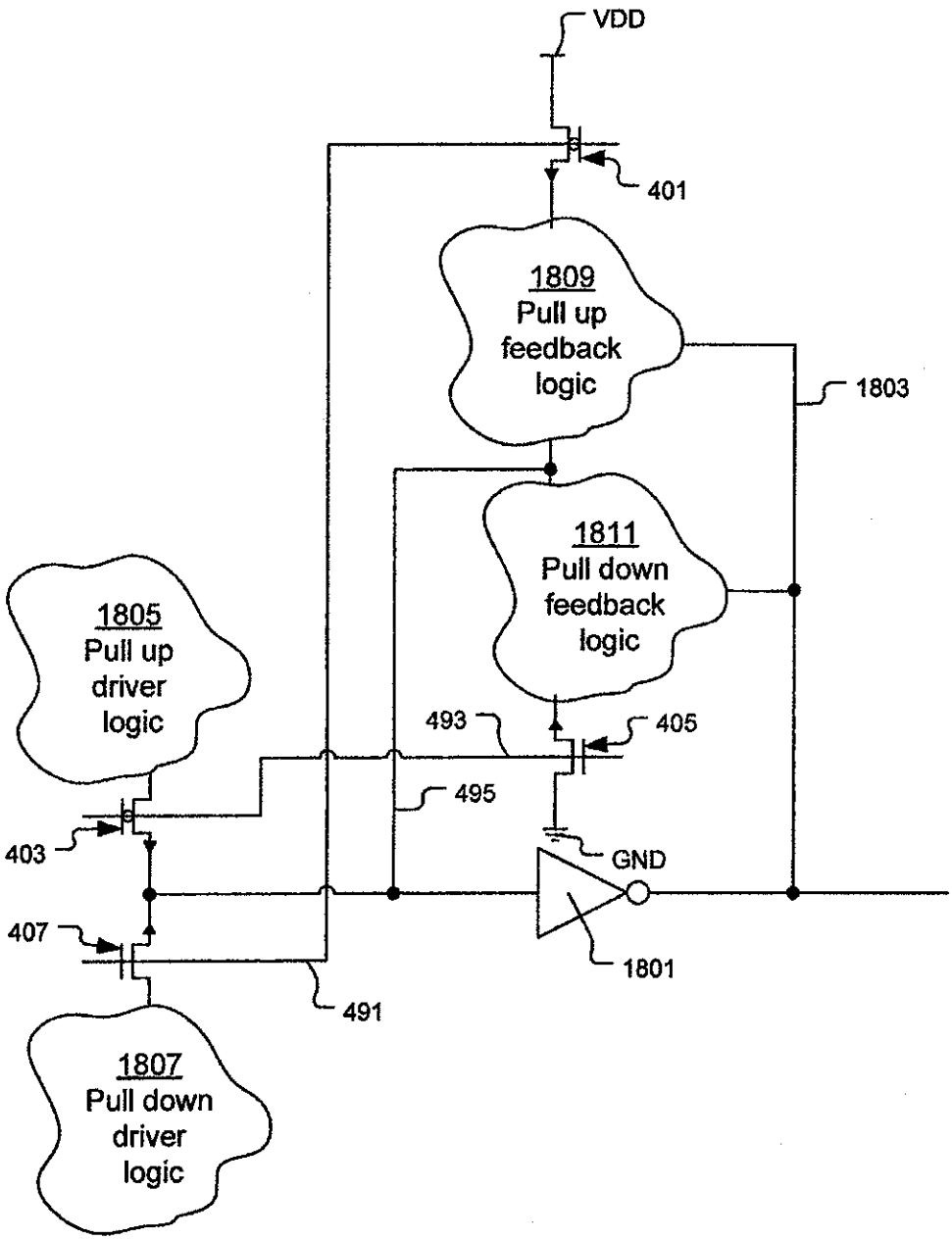

VDD
401
1809
Pull up
feedback
logic
1803
1811
Pull down
feedback
logic
1805
Pull up
driver
logic
493
405
495
403
GND
407
1801
491
1807
Pull down
driver
logic

Fig. 20A

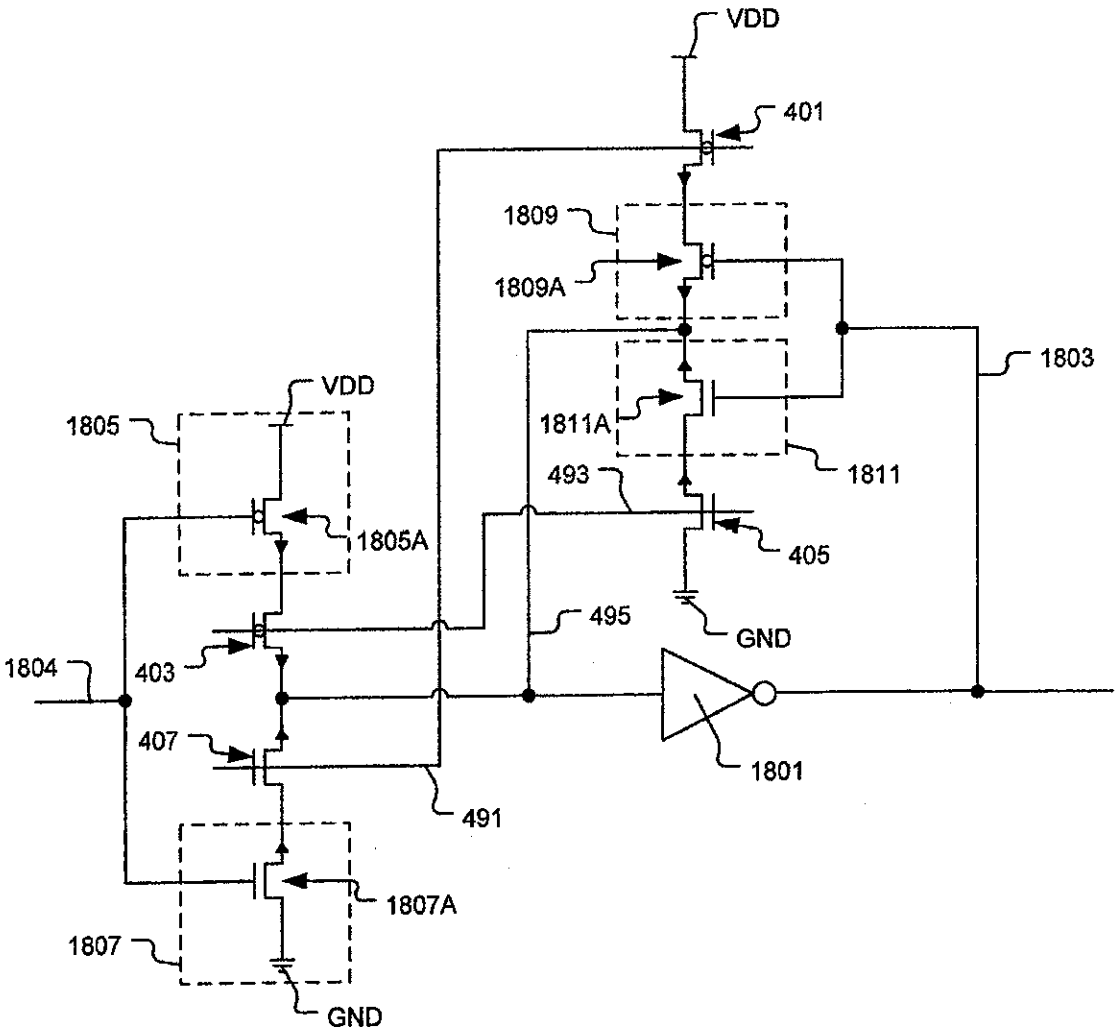

VDD
401
1809
1809A
1803
VDD
1805
1811A
1811
493
1805A
405
GND
495
1804
403
407
1801
491
1807A
1807
GND

Fig. 20B

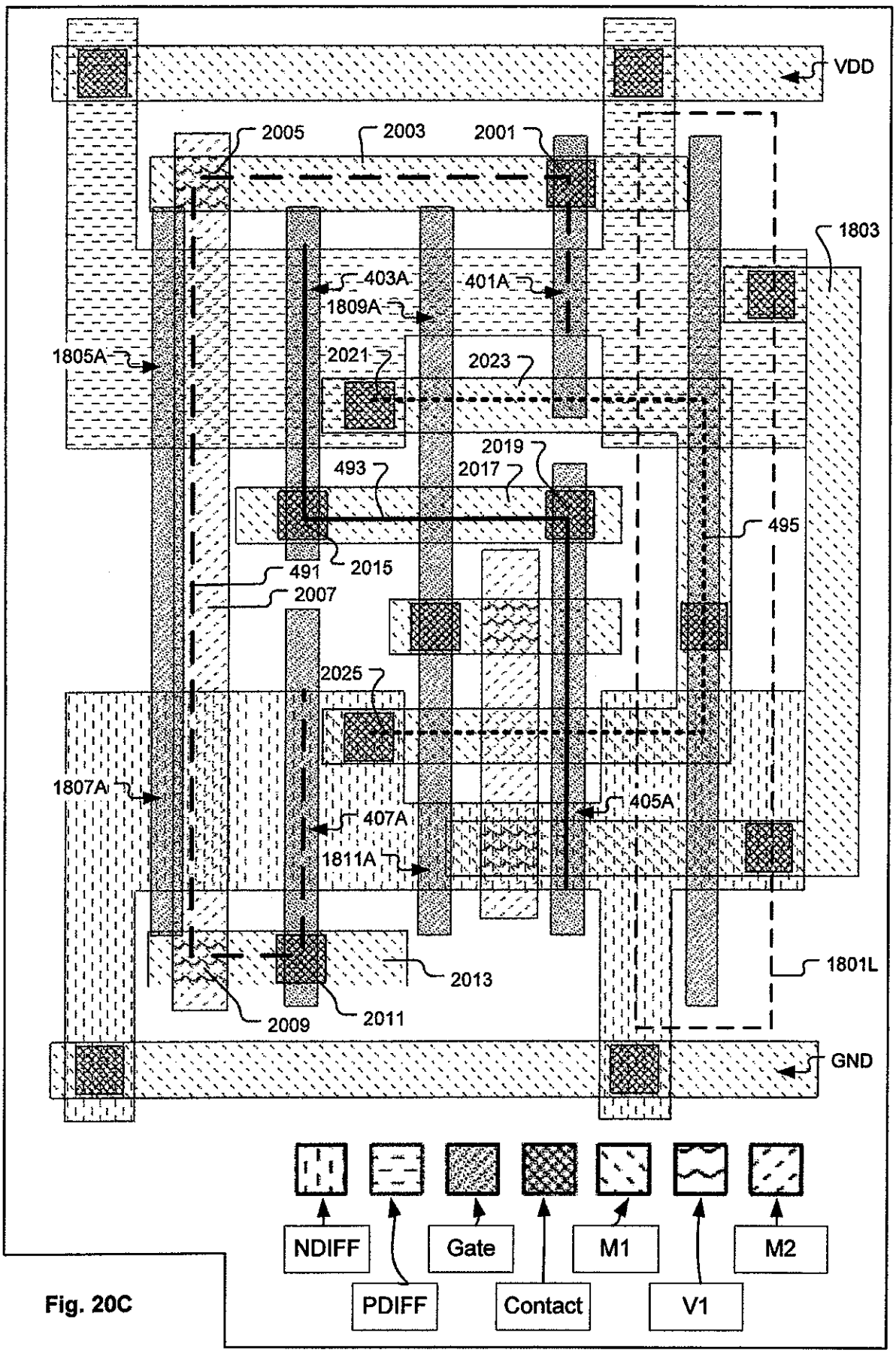

VDD
2005
2003
2001
1803
403A
401A
1809A
1805A
2021
2023
2019
493
2017
495
2015
491
2007
2025
1807A
405A
407A
1811A
2013
1801L
2009
2011
GND
NDIFF
Gate
M1
M2
PDIFF
Contact
V1

Fig. 20C

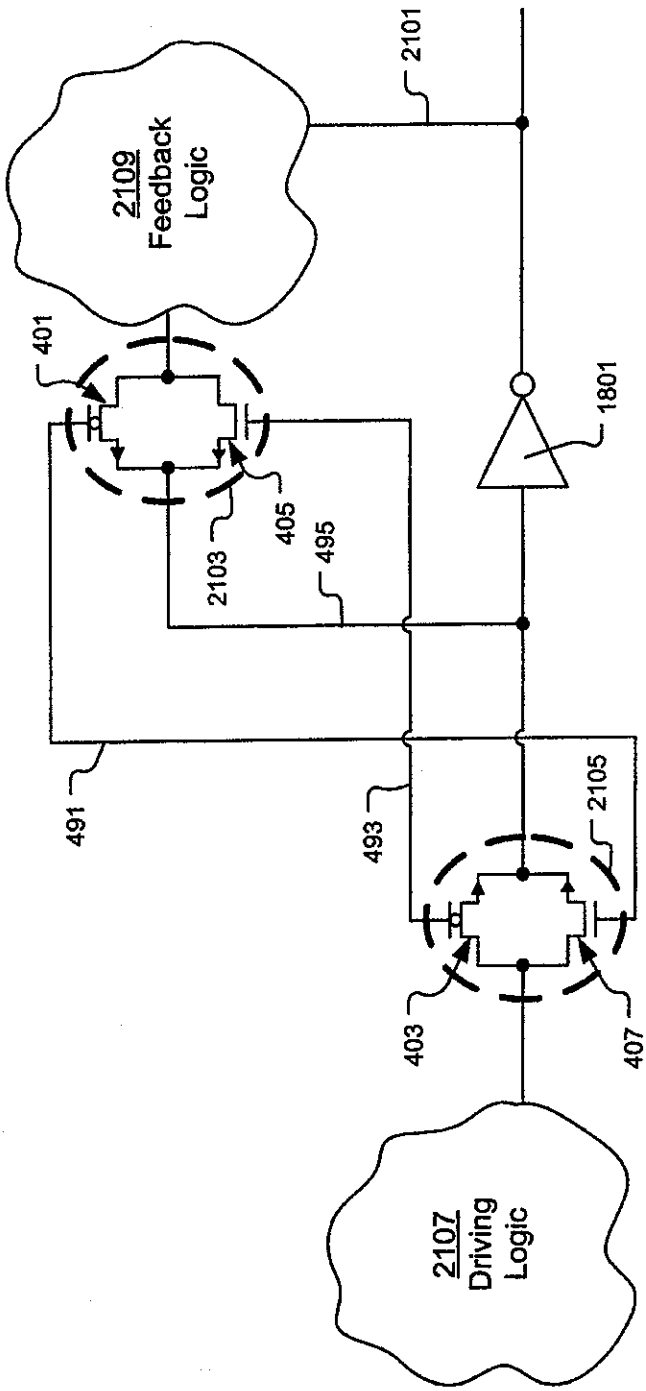

2109
Feedback
Logic
2101
401
1801
405
2103
495
491
493
2105
403
407
2107
Driving
Logic

Fig. 21A

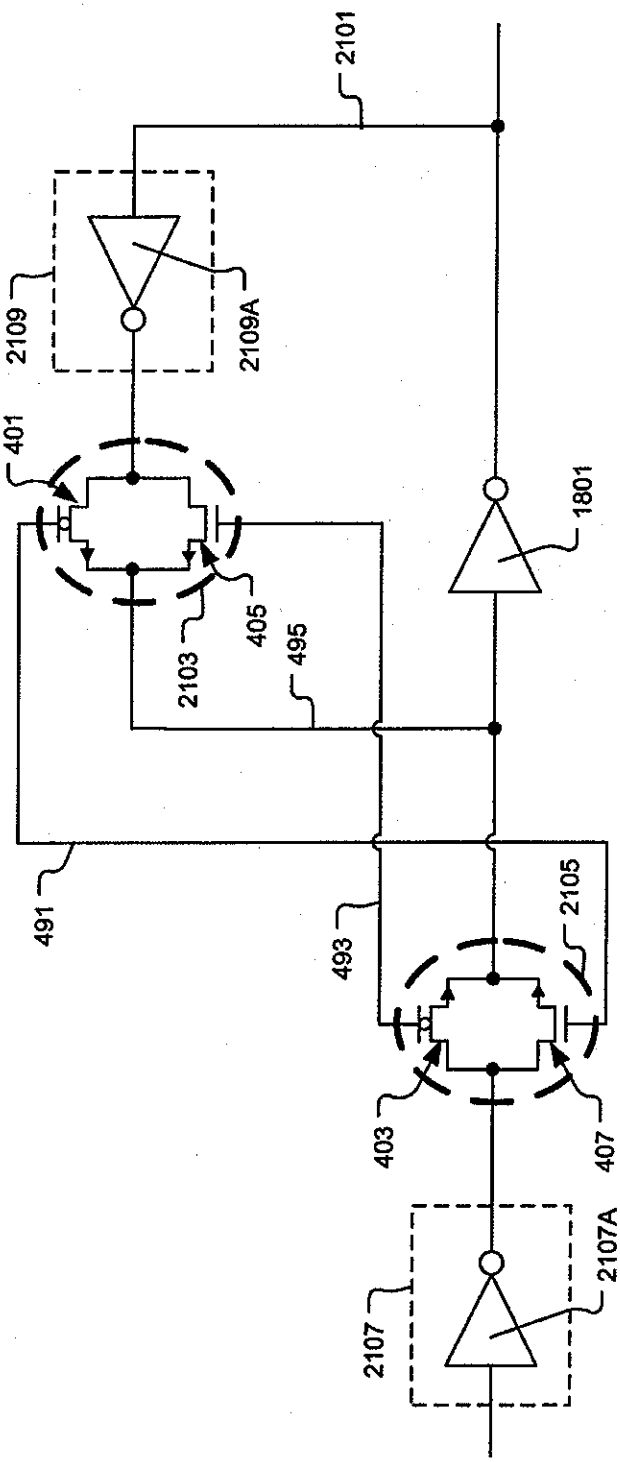

2101
2109
2109A
401
1801
405
2103
495
491
493
2105
403
407
2107
2107A

Fig. 21B

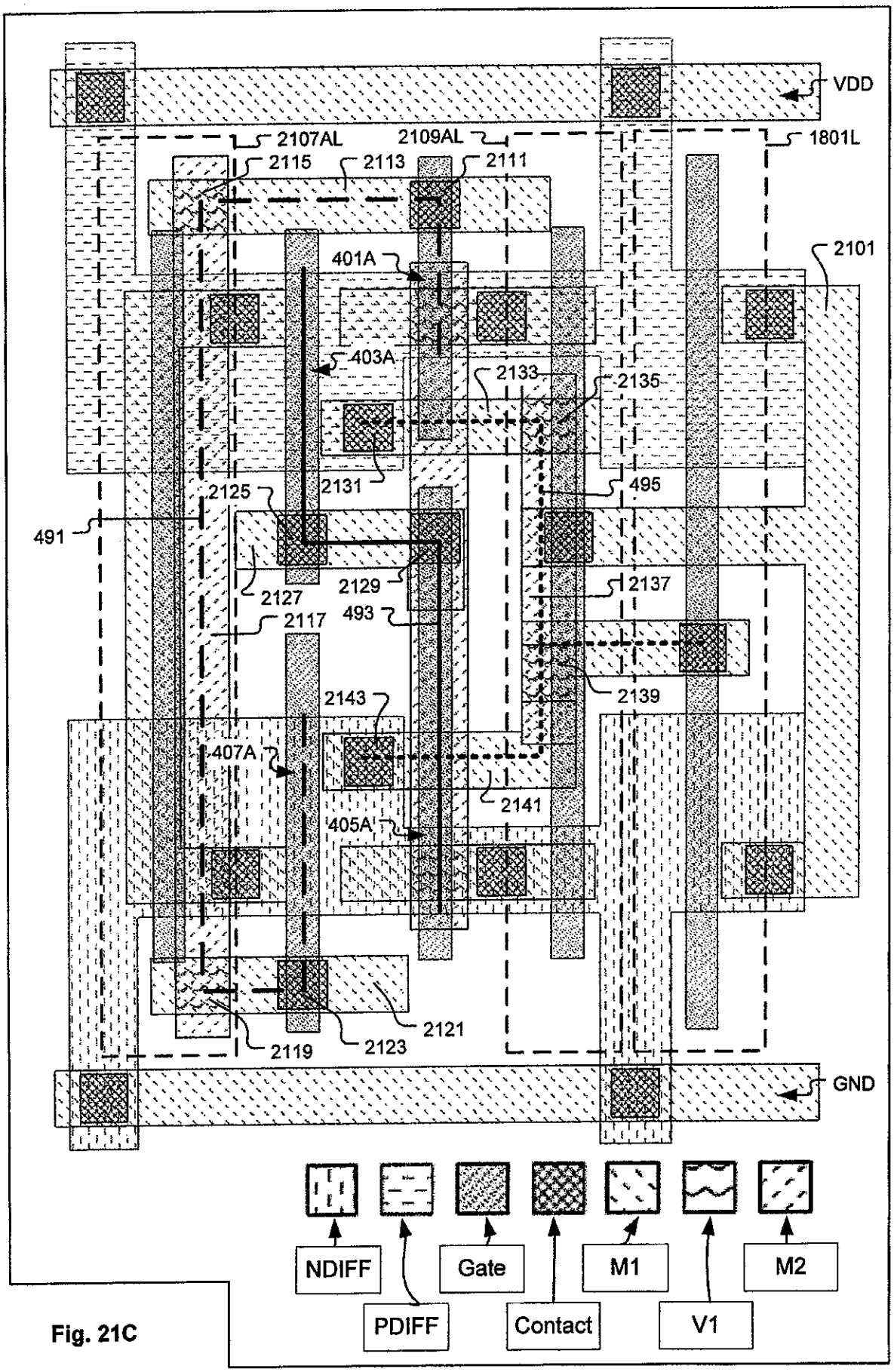

VDD
2107AL
2109AL
1801L
2115
2113
2111
2101
401A
403A
2133
2135
2131
495
2125
491
2127
2129
2137
493
2117
2139
2143
407A
2141
405A
2121
2119
2123
GND
NDIFF
Gate
M1
M2
PDIFF
Contact
V1

Fig. 21C

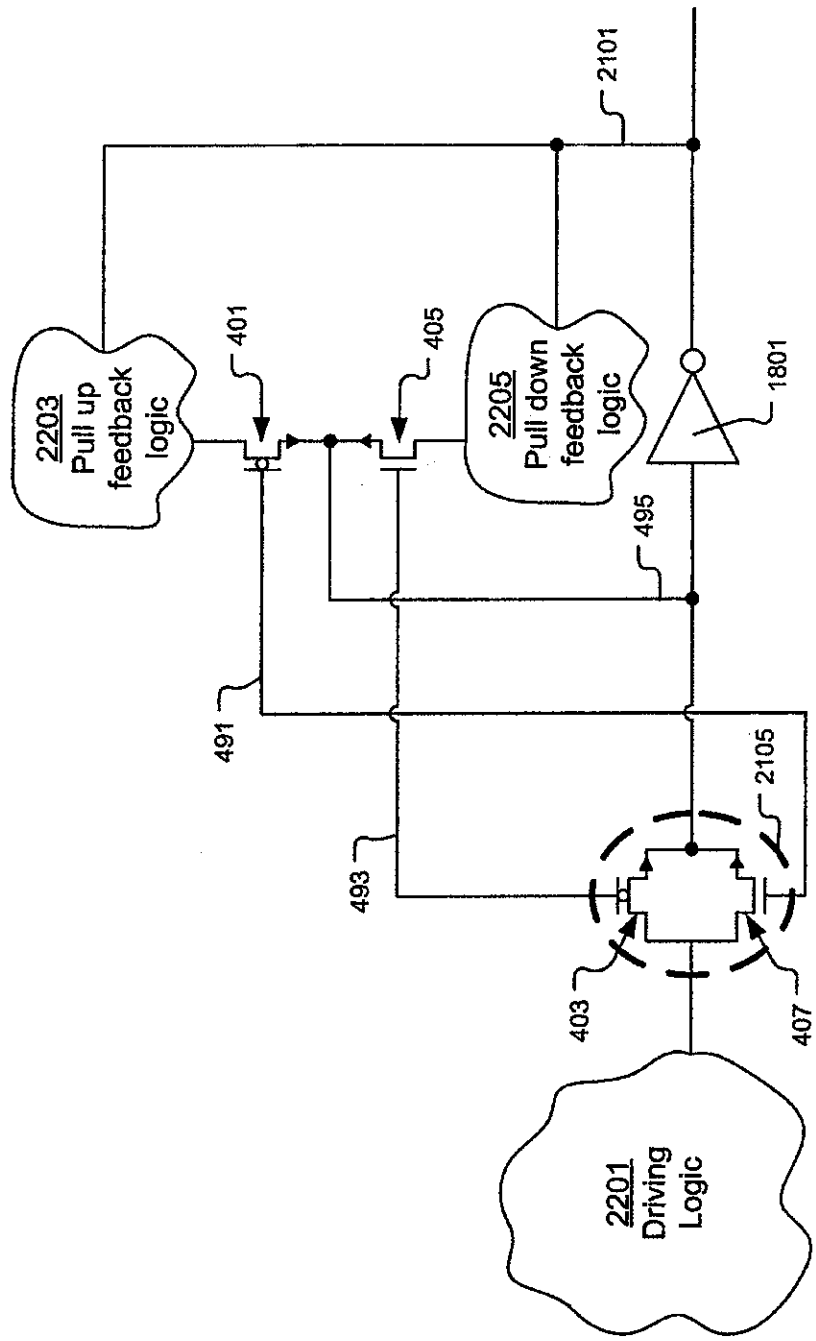

2101
2203
Pull up
feedback
logic
401
405
2205
Pull down
feedback
logic
1801
495
491
493
2105
403
407
2201
Driving
Logic

Fig. 22A

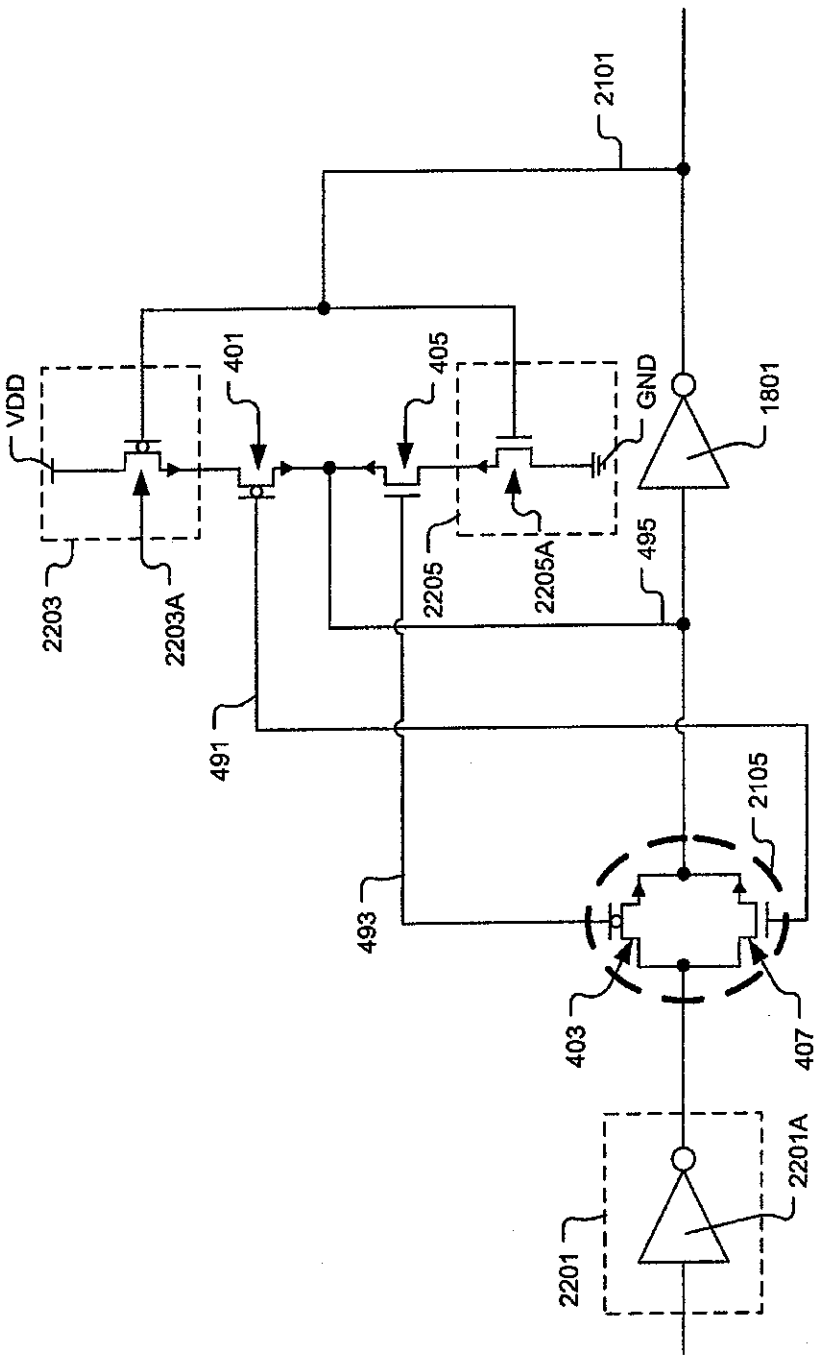

2101
VDD
401
405
GND
1801
2203
2203A
2205
2205A
495
491
2105
493
403
407
2201A
2201

Fig. 22B

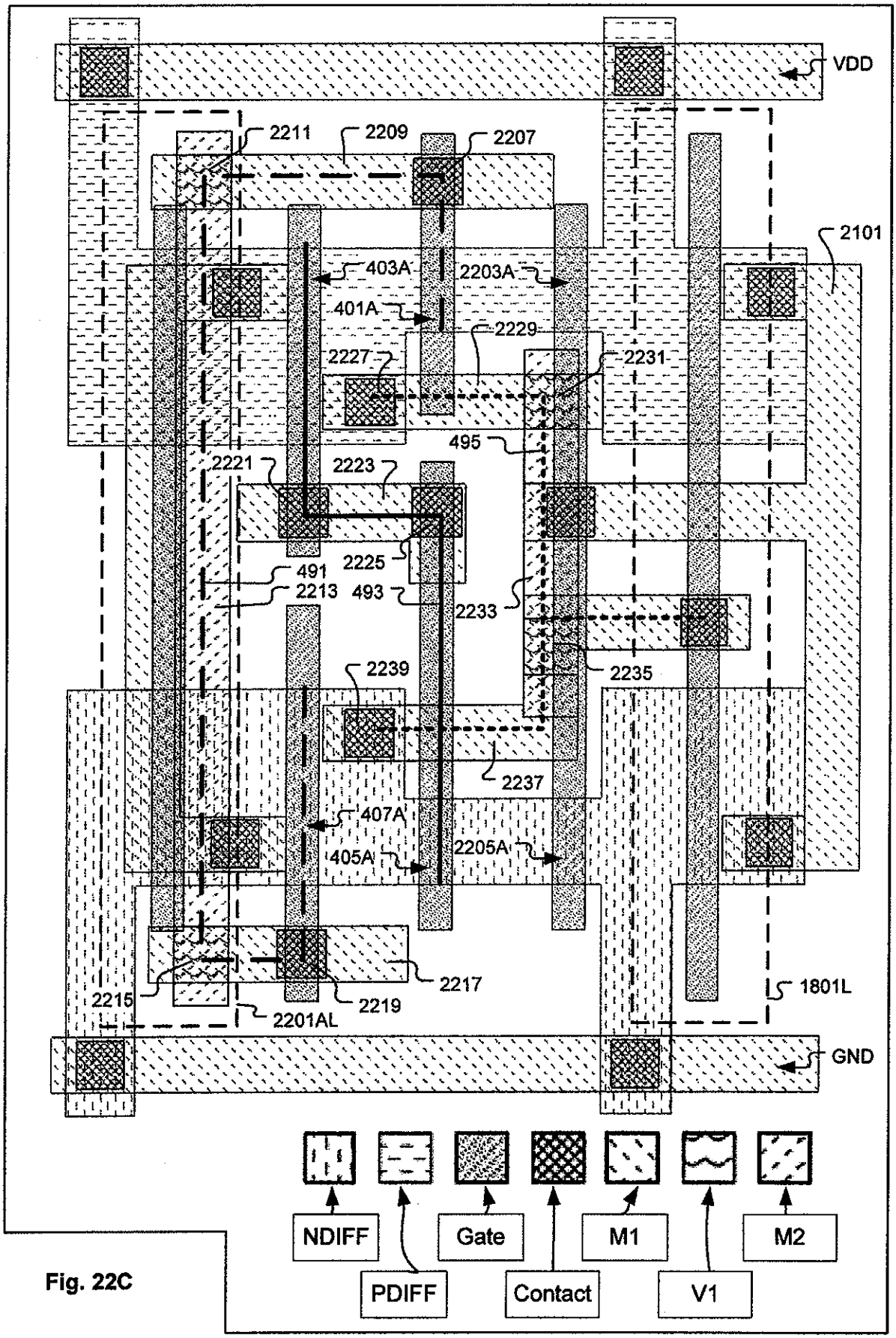

VDD
2211
2209
2207
2101
403A
2203A
401A
2229
2227
2231
495
2221
2223
2225
491
2213
493
2233
2235
2239
2237
407A
405A
2205A
2217
2215
2219
2201AL
1801L
GND
NDIFF
Gate
M1
M2
PDIFF
Contact
V1

Fig. 22C