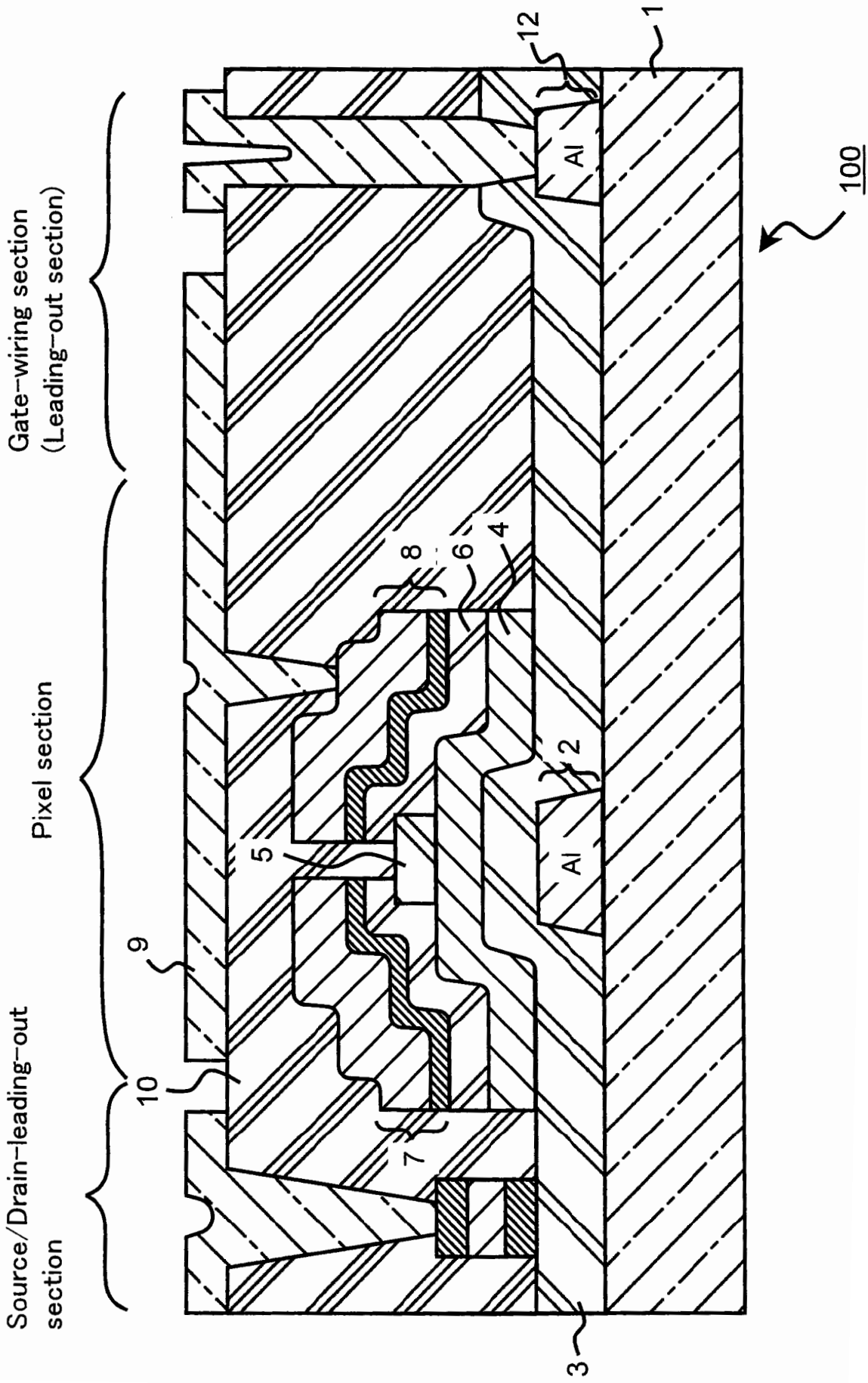
Fig. 1


Source/Drain-leading-out section
Pixel section
Gate-wiring section (Leading-out section)
100
1
2
3
4
5
6
7
8
9
10
12
Al
Al
Al

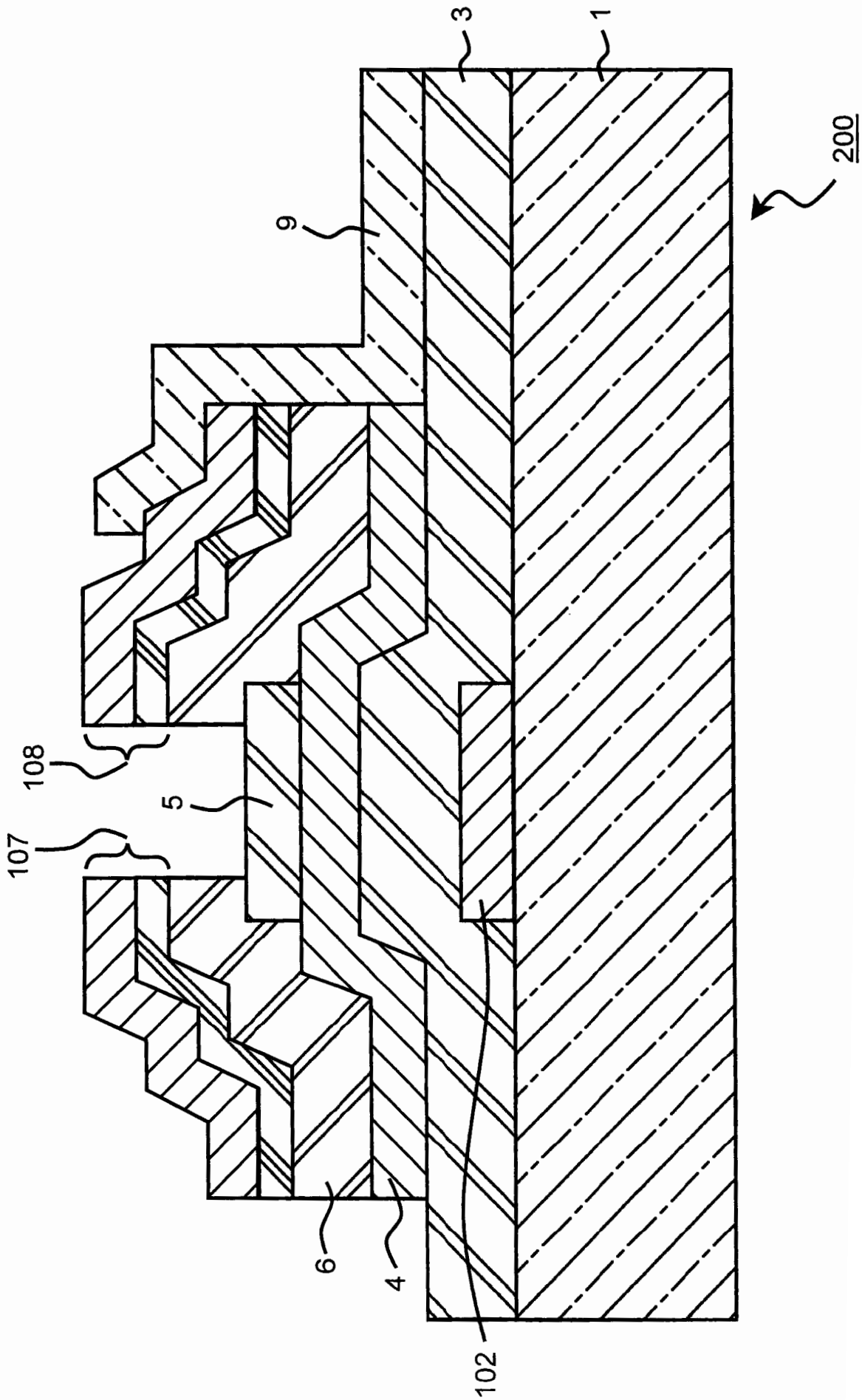


Fig.2

Fig. 3 (1)

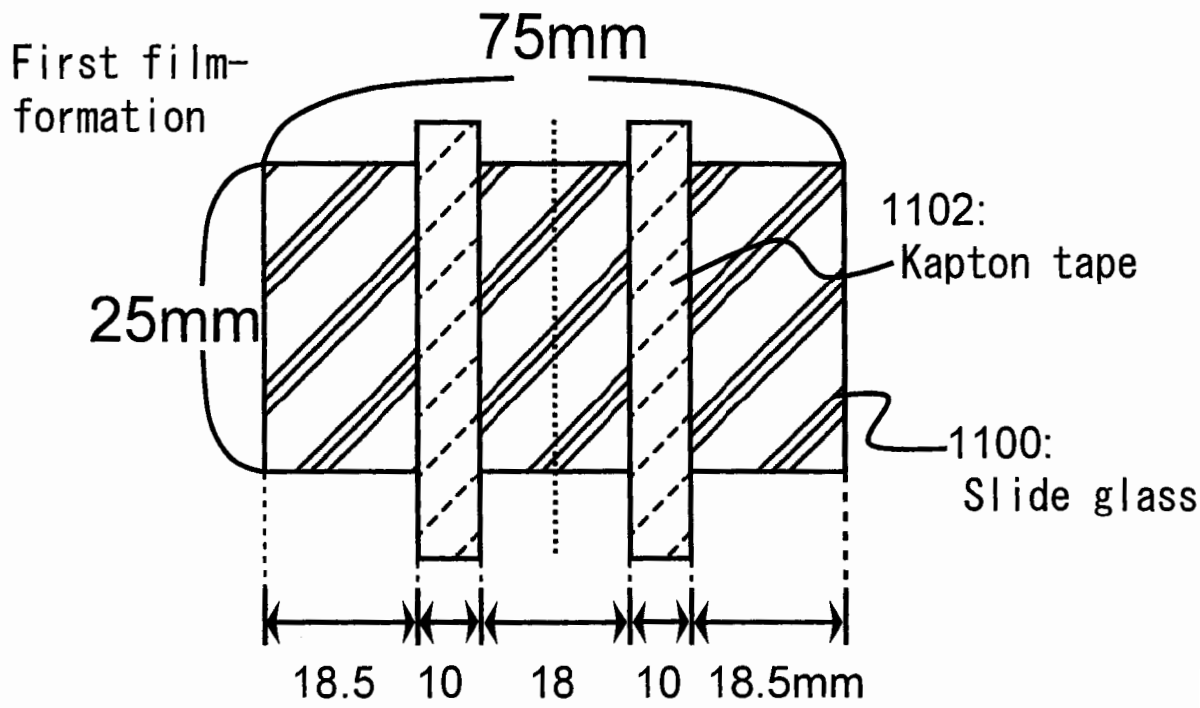

First film-formation
75mm
25mm
1102: Kapton tape
1100: Slide glass
18.5
10
18
10
18.5mm

Fig. 3 (2)

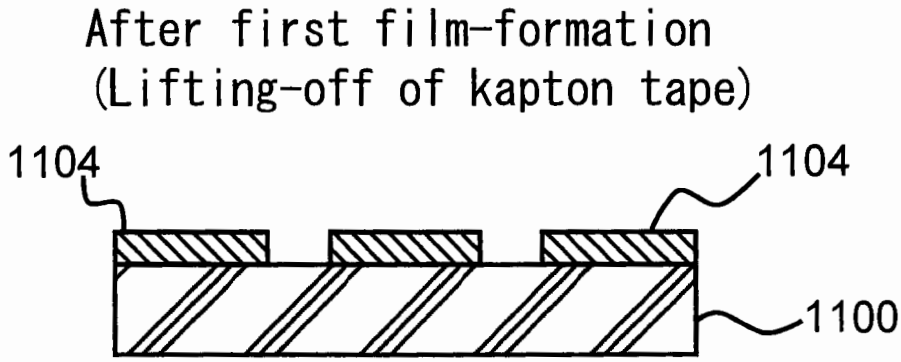

After first film-formation
(Lifting-off of kapton tape)
1104
1104
1100

Fig. 4(1)

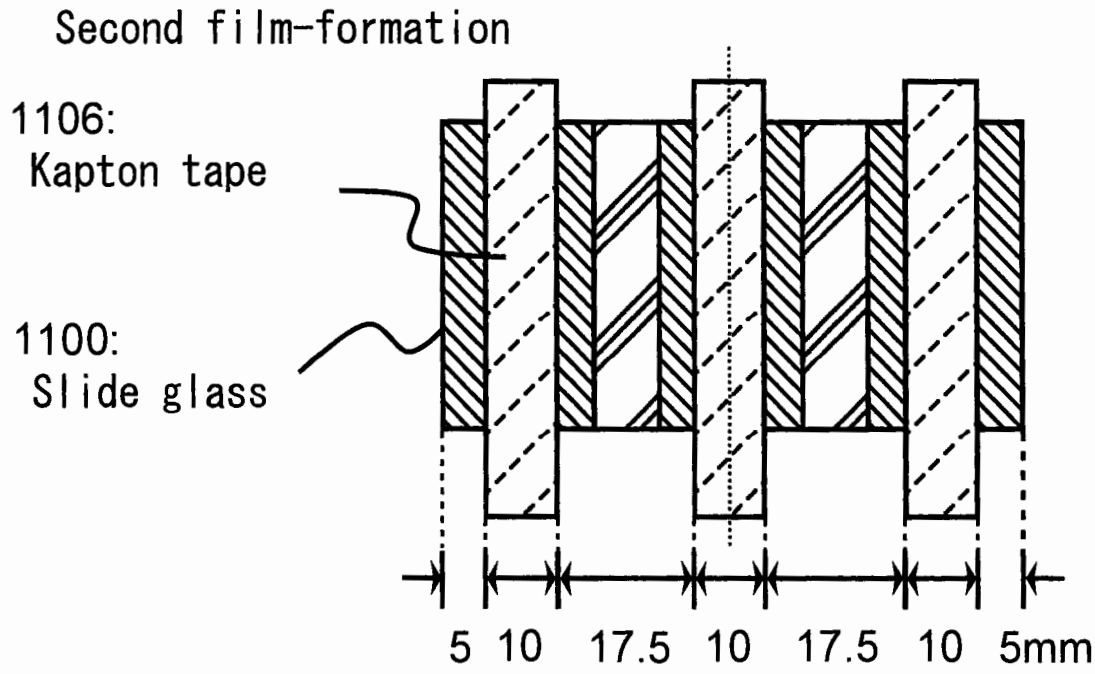

Second film-formation
1106:
Kapton tape
1100:
Slide glass
5 10 17.5 10 17.5 10 5mm

Fig. 4(2)

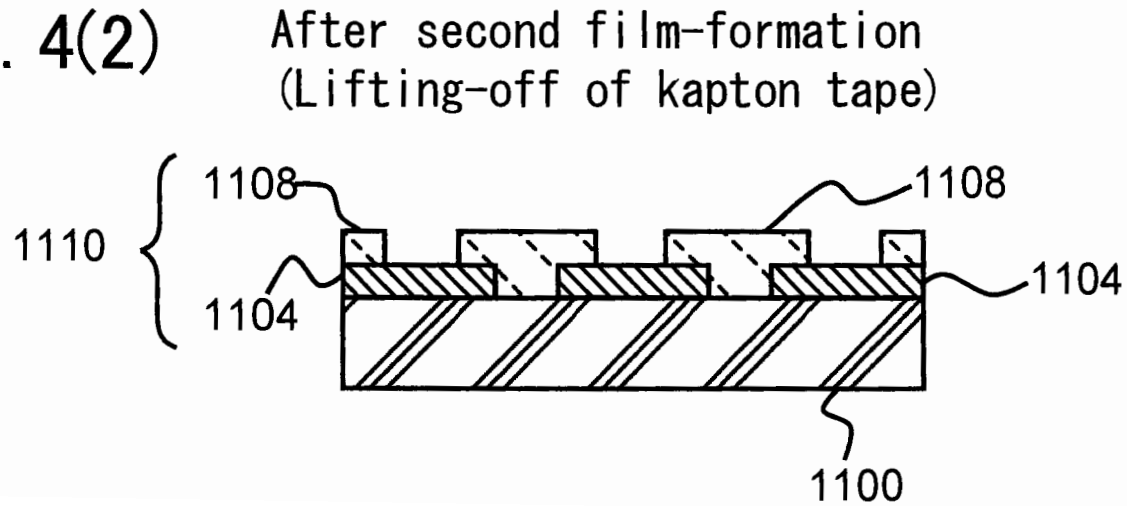

After second film-formation
(Lifting-off of kapton tape)
1110
1108
1108
1104
1104
1100

Fig. 5(1)

Resistance measurement

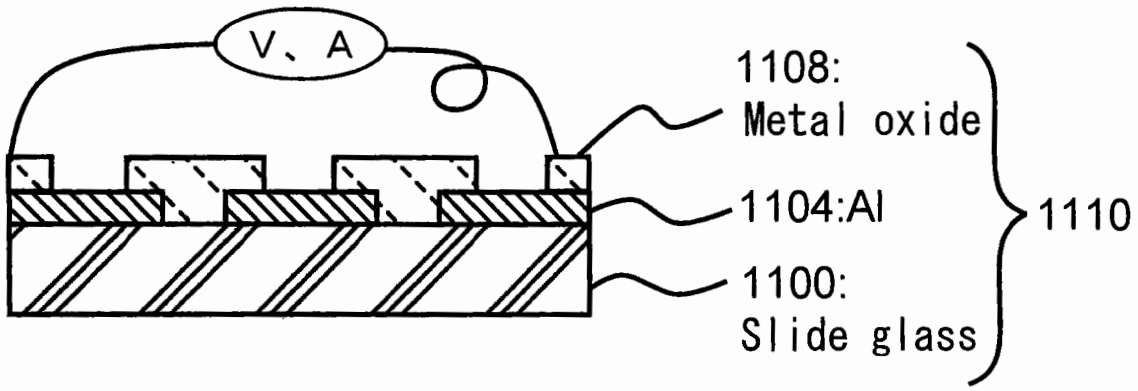


Fig. 5(2)

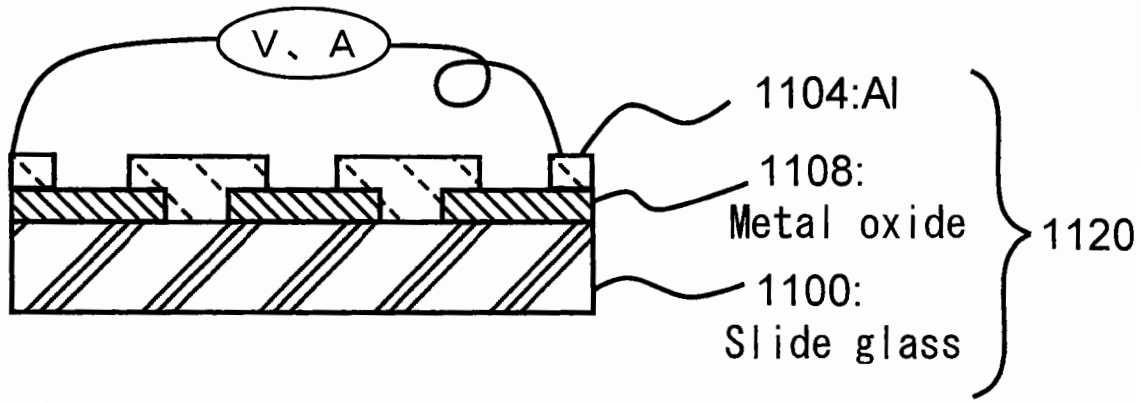


Fig. 6(a)

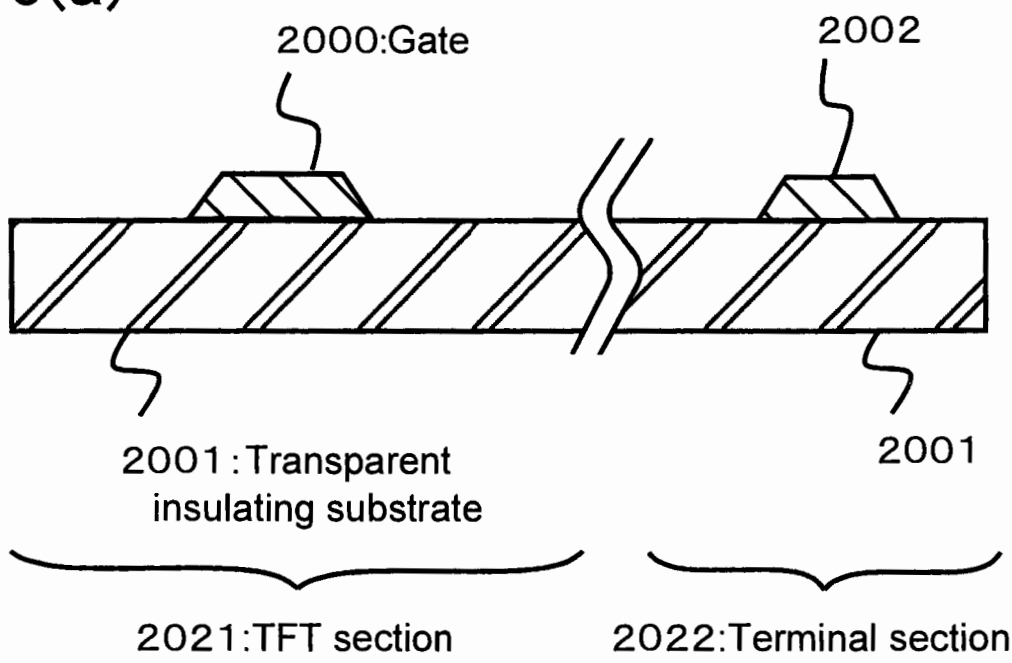

2000:Gate
2002
2001 : Transparent insulating substrate
2001
2021:TFT section
2022:Terminal section

Fig. 6(b)

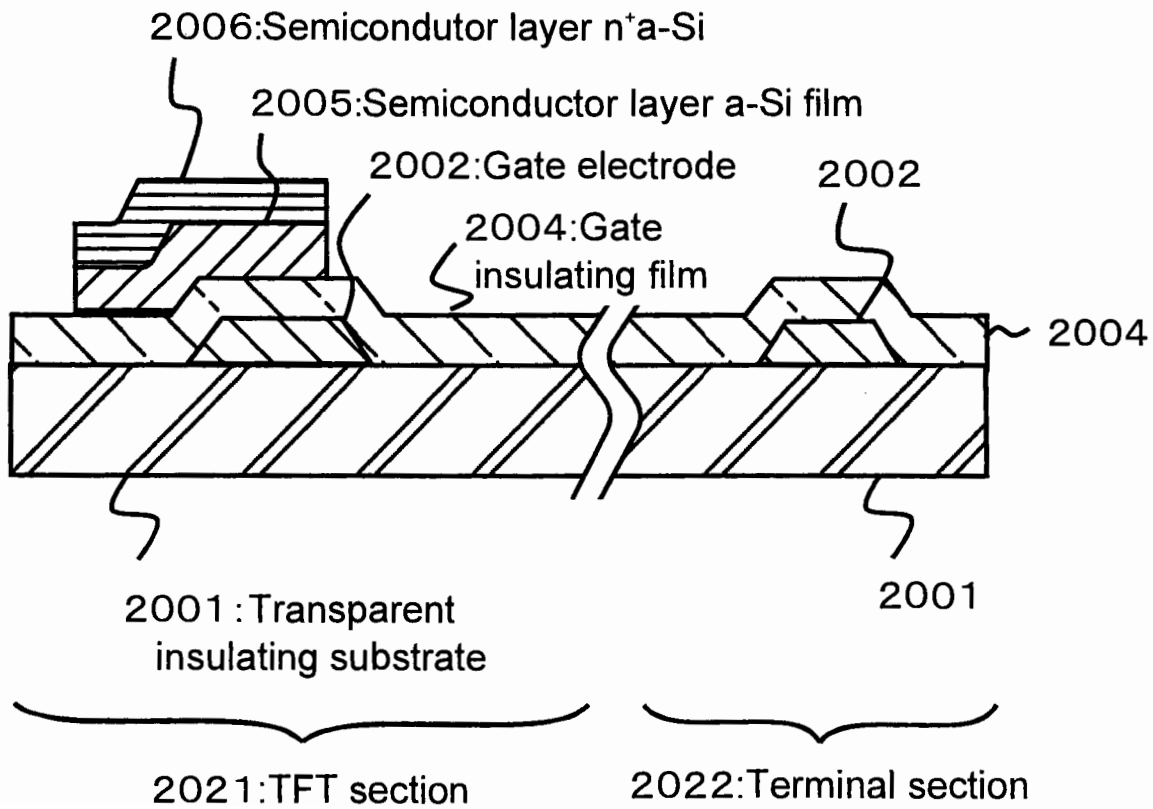

2006:Semicondutor layer n+a-Si
2005:Semiconductor layer a-Si film
2002:Gate electrode
2002
2004:Gate insulating film
2004
2001 : Transparent insulating substrate
2001
2021:TFT section
2022:Terminal section

Fig. 7(a)

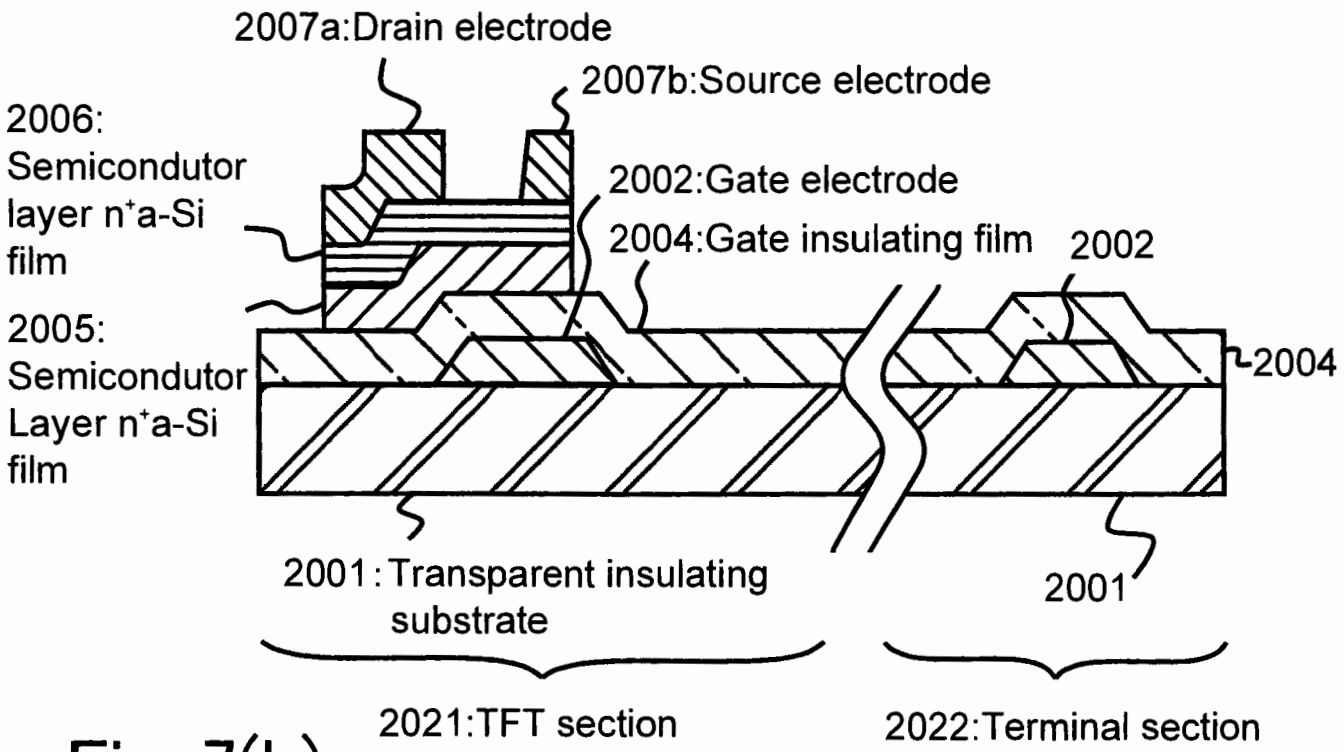

2007a:Drain electrode
2007b:Source electrode
2006:
Semicondutor
layer n+a-Si
film
2002:Gate electrode
2004:Gate insulating film
2002
2005:
Semicondutor
Layer n+a-Si
film
2004
2001 : Transparent insulating
substrate
2001
2021:TFT section
2022:Terminal section

Fig. 7(b)

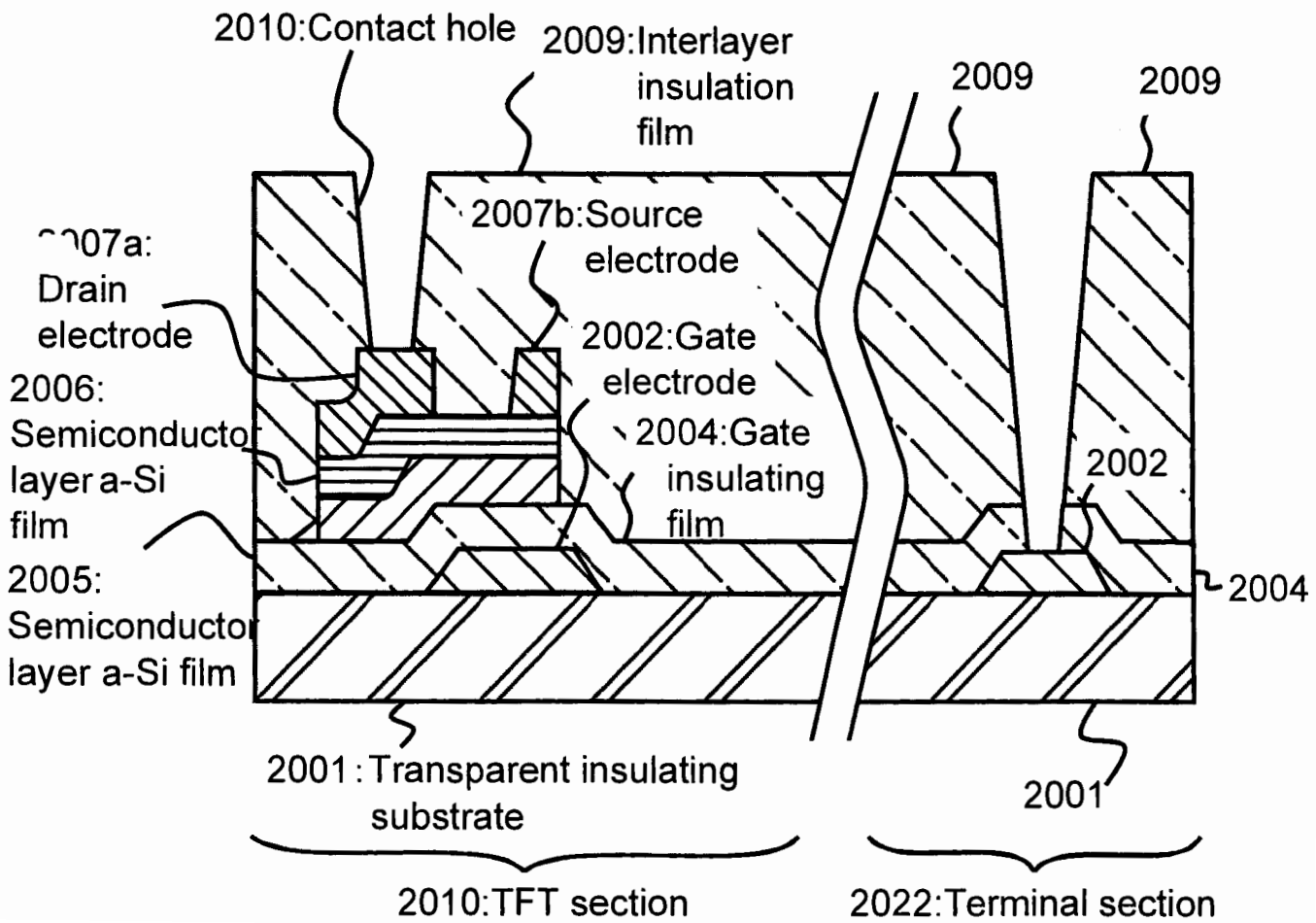

2010:Contact hole
2009:Interlayer
insulation
film
2009
2009
2007b:Source
electrode
2007a:
Drain
electrode
2002:Gate
electrode
2006:
Semiconductor
layer a-Si
film
2004:Gate
insulating
film
2002
2005:
Semiconductor
layer a-Si film
2004
2001 : Transparent insulating
substrate
2001
2010:TFT section
2022:Terminal section

Fig.8

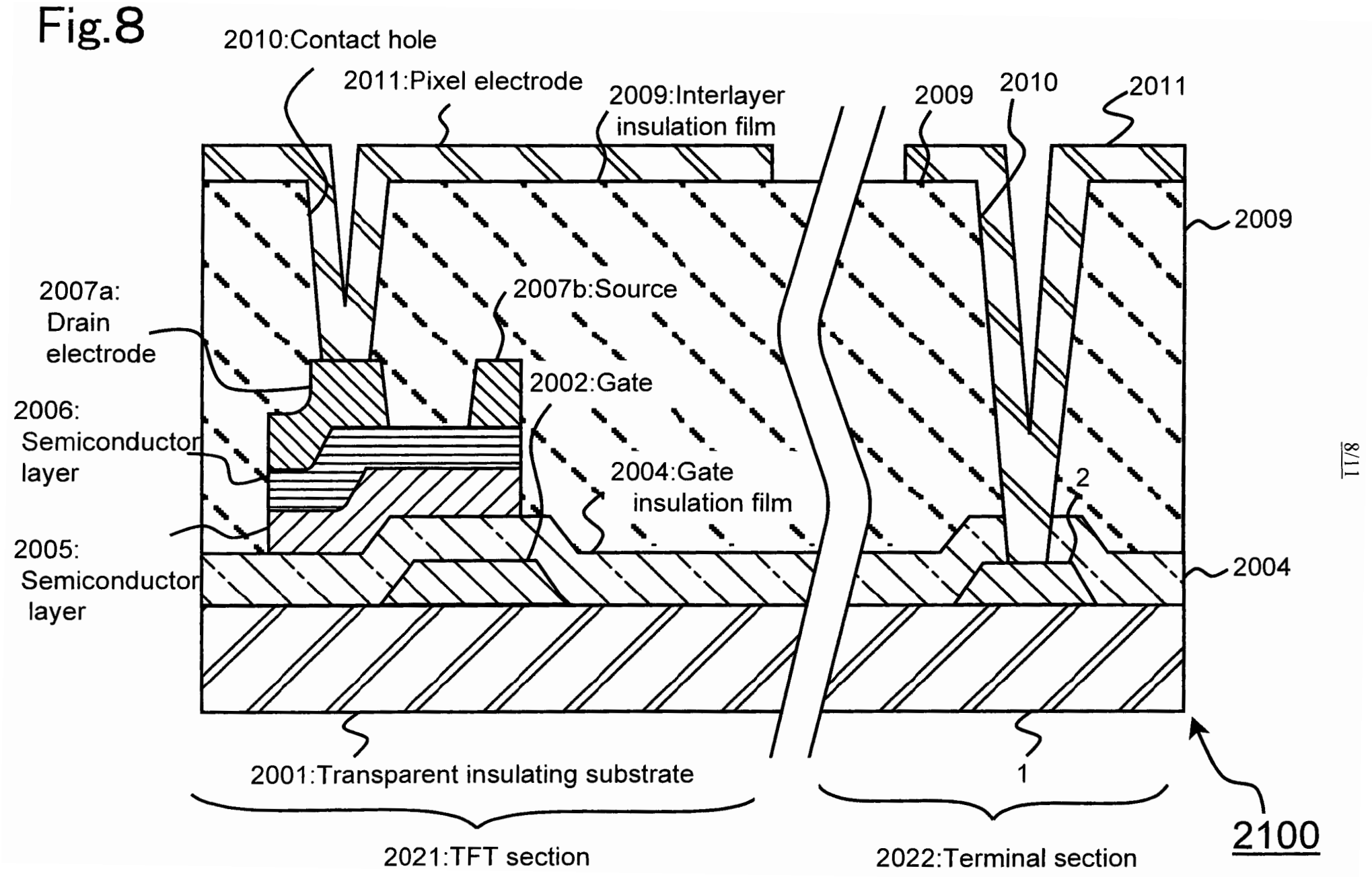
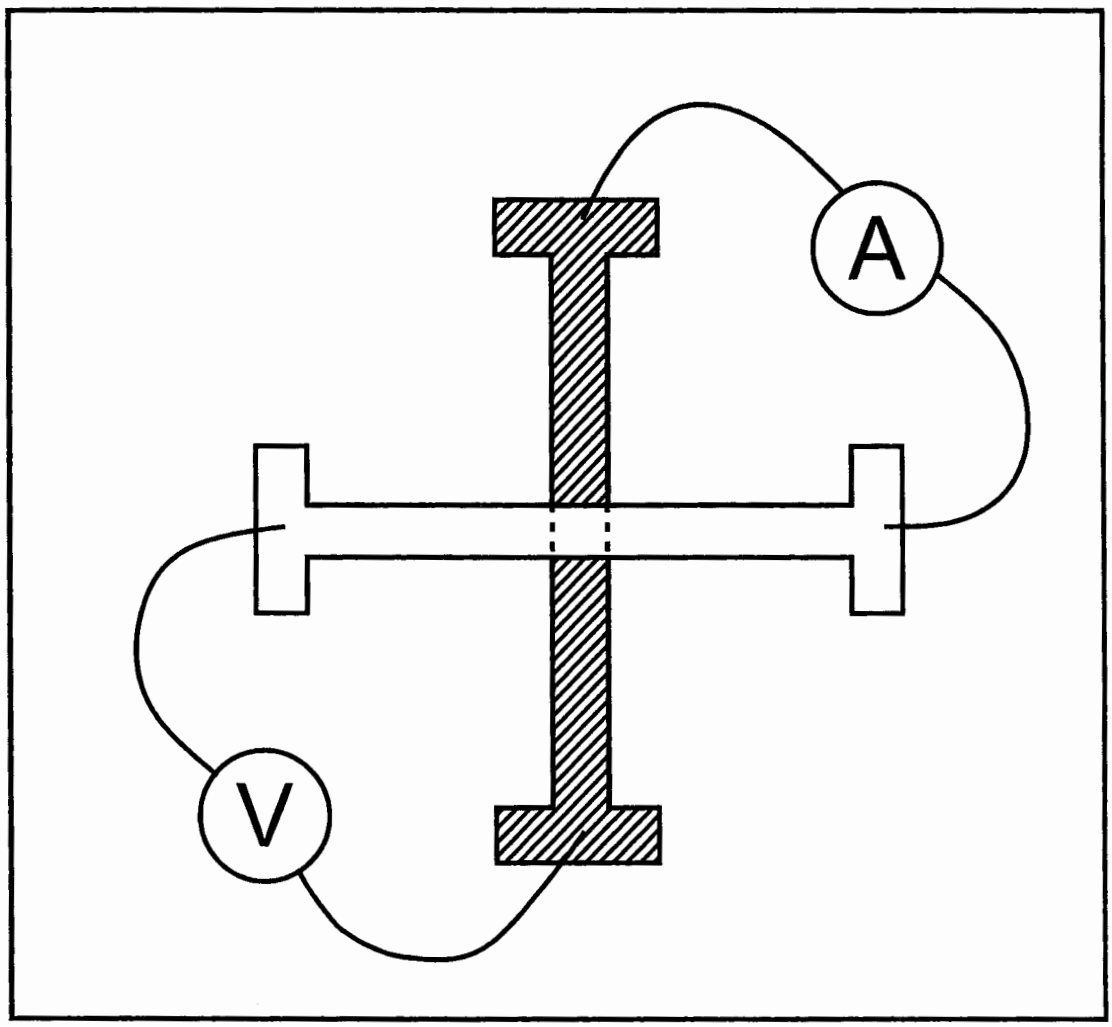

2010:Contact hole
2011:Pixel electrode
2009:Interlayer insulation film
2009
2010
2011
2009
2007a: Drain electrode
2007b:Source
2002:Gate
2006: Semiconductor layer
2004:Gate insulation film
2
2005: Semiconductor layer
2004
2001:Transparent insulating substrate
1
2100
2021:TFT section
2022:Terminal section

Fig.9

Wiring of a Kelvin pattern



Al alloy wiring pattern

Metal oxide wiring pattern

Fig.10

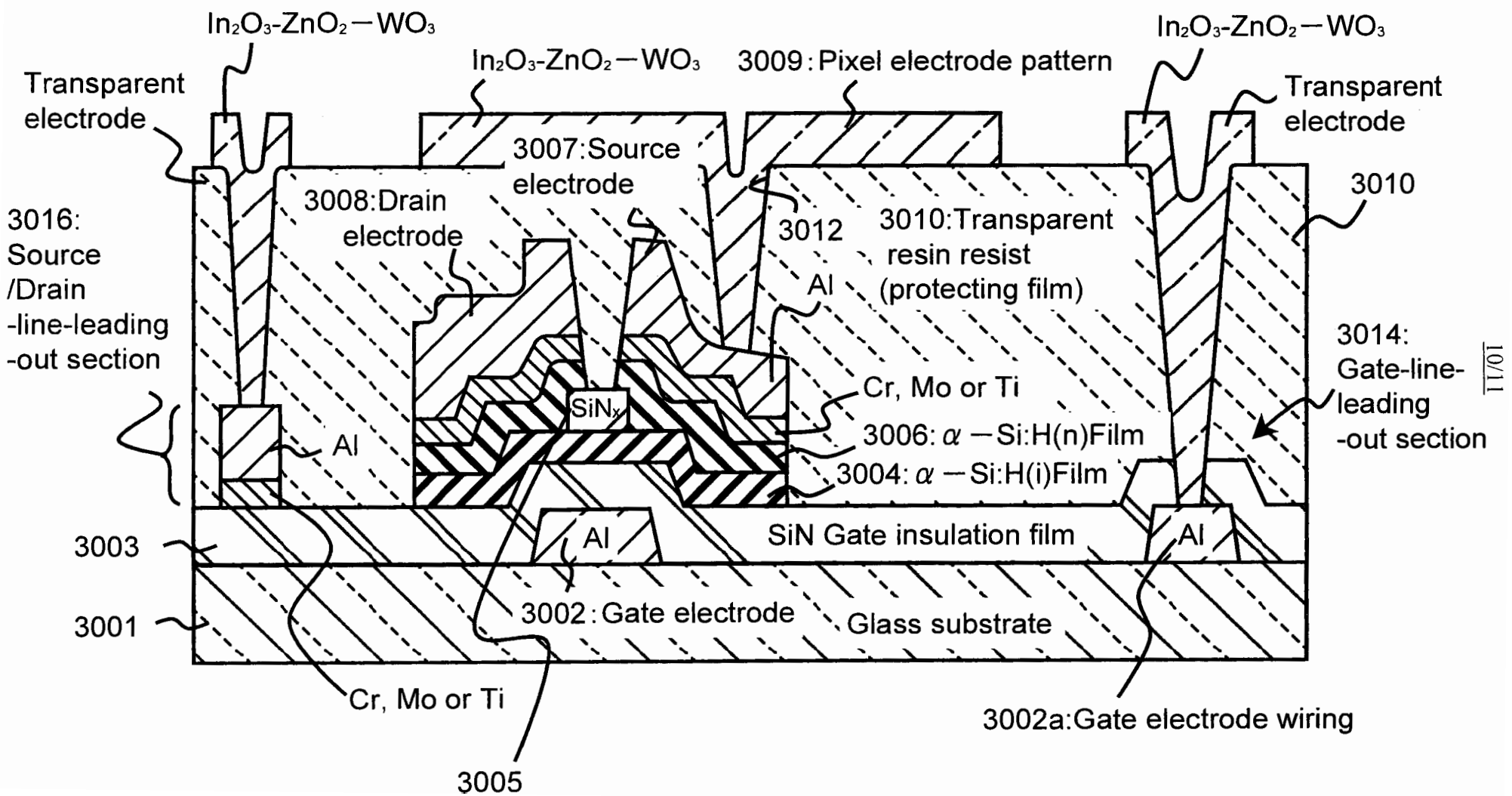
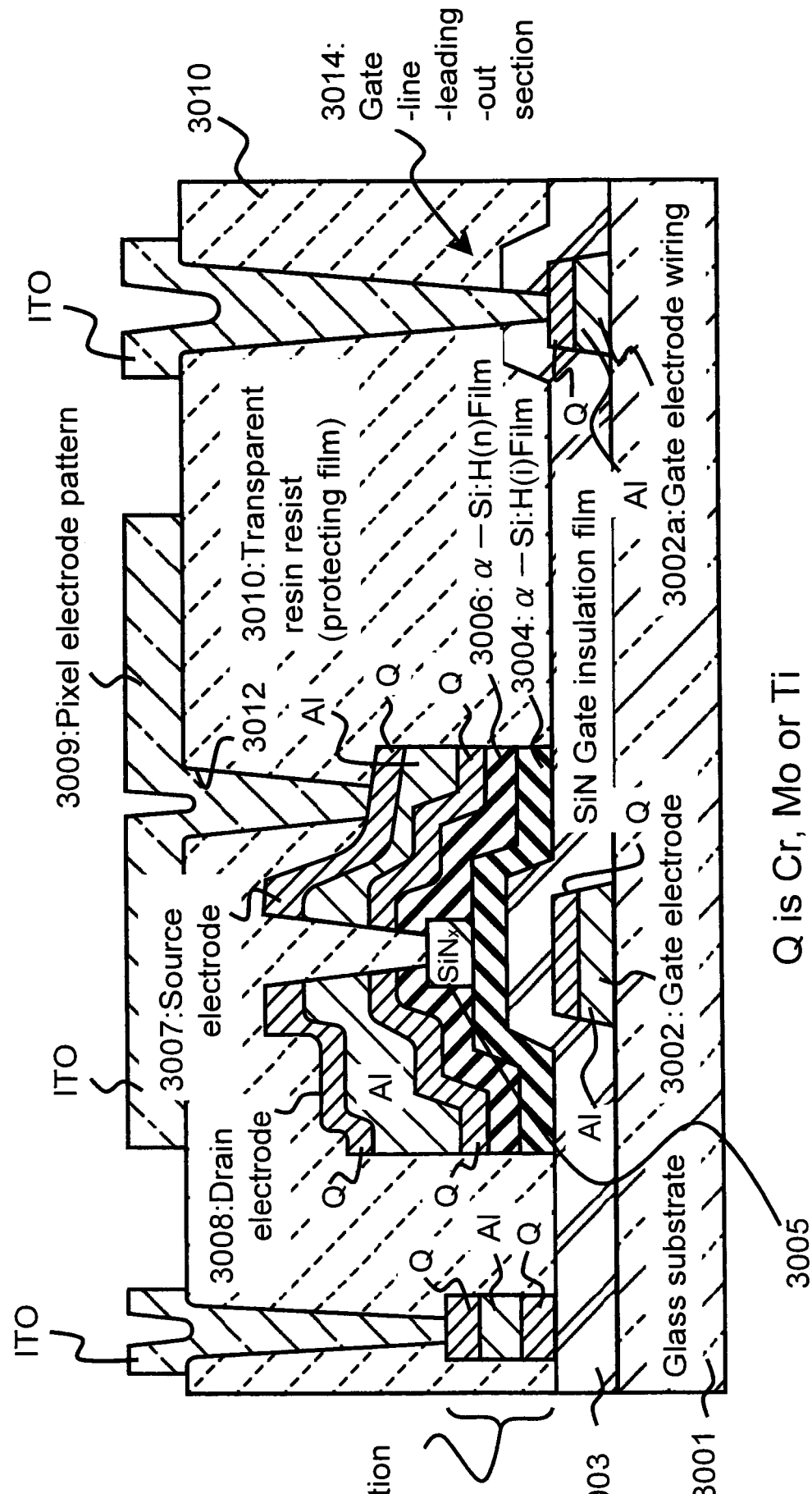

In_2O_3-ZnO_2—WO_3
In_2O_3-ZnO_2—WO_3
3009: Pixel electrode pattern
In_2O_3-ZnO_2—WO_3
Transparent electrode
Transparent electrode
3007: Source electrode
3008: Drain electrode
3012
3010
3010: Transparent resin resist (protecting film)
3016: Source /Drain -line-leading -out section
Al
3014: Gate-line-leading -out section
Cr, Mo or Ti
SiN_x
Al
3006: α—Si:H(n)Film
3004: α—Si:H(i)Film
3003
Al
SiN Gate insulation film
Al
3001
3002: Gate electrode
Glass substrate
Cr, Mo or Ti
3005
3002a: Gate electrode wiring

Fig. 11


ITO
ITO
ITO
3009:Pixel electrode pattern
3010
3014: Gate -line -leading -out section
3010:Transparent resin resist (protecting film)
3012
3007:Source electrode
3008:Drain electrode
Al
Q
SiN_x
3006: α —Si:H(n)Film
3004: α —Si:H(i)Film
SiN Gate insulation film
3002a:Gate electrode wiring
3002:Gate electrode
Glass substrate
3005
3003
3001
3016: Source /Drain -line -leading -out section
Q is Cr, Mo or Ti