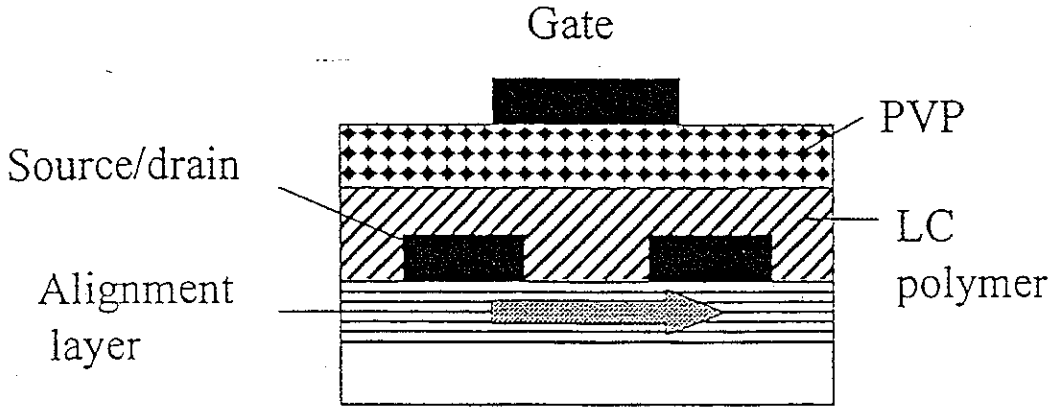
FIG.1


Gate
PVP
Source/drain
LC
polymer
Alignment
layer

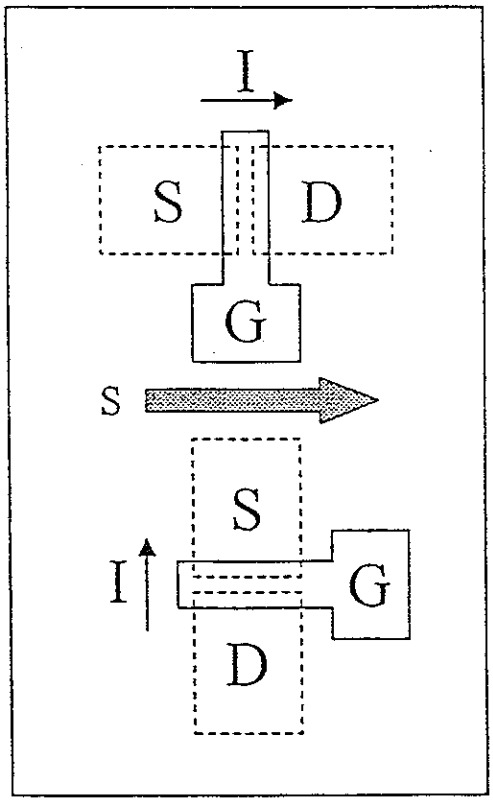

I
S
D
G
S
S
I
G
D

FIG.2

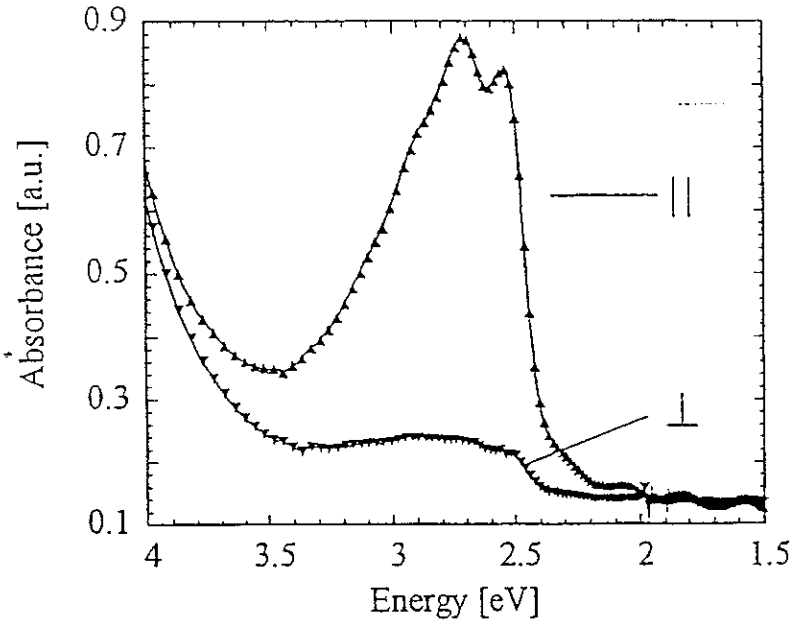

0.9
0.7
0.5
0.3
0.1
Absorbance [a.u.]
4
3.5
3
2.5
2
1.5
Energy [eV]
||
⊥

FIG.3

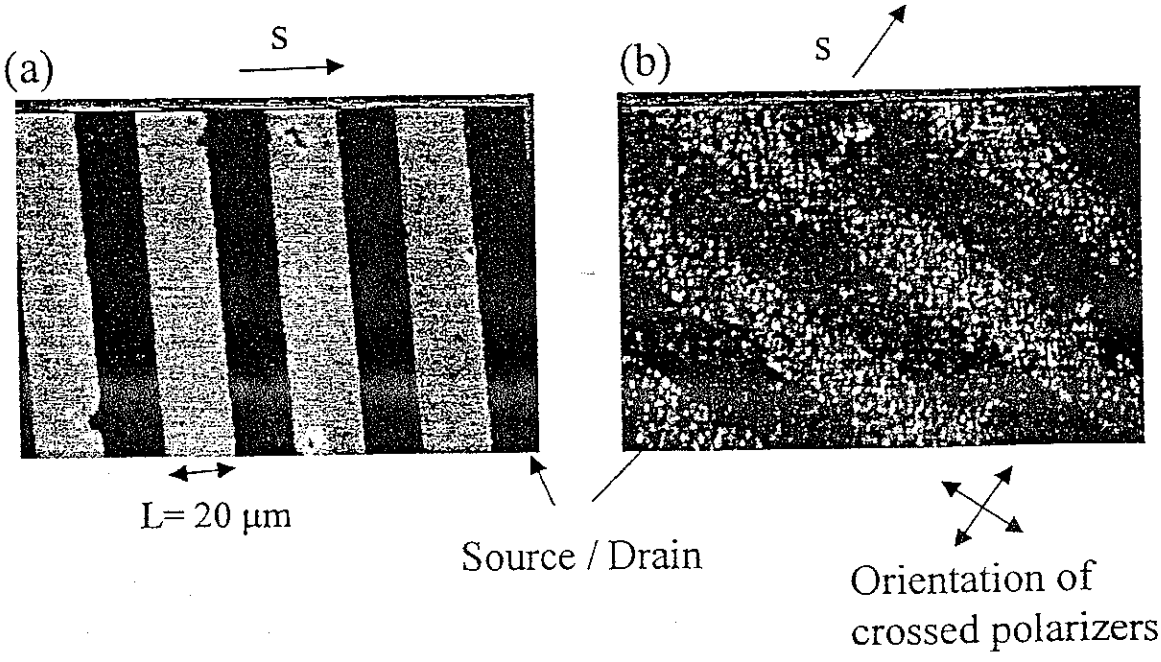

(a)
S
(b)
S
L= 20 μm
Source / Drain
Orientation of
crossed polarizers

FIG.4

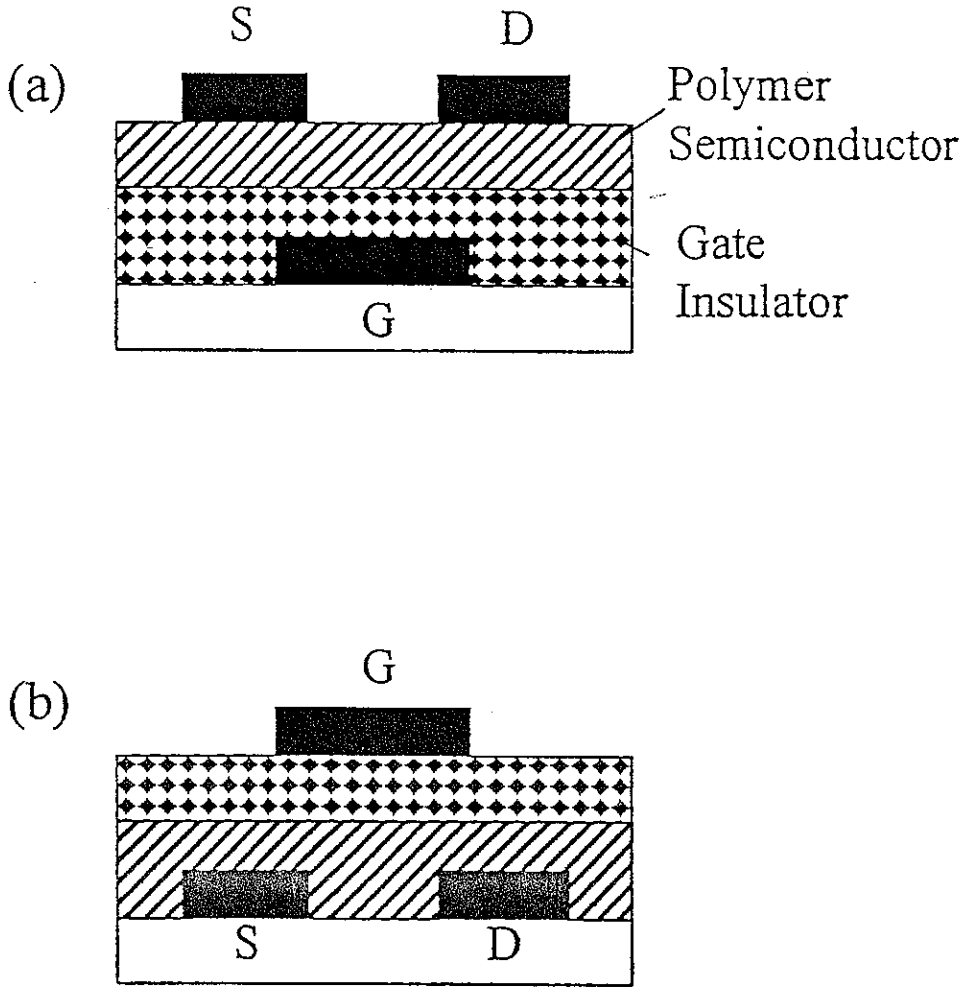
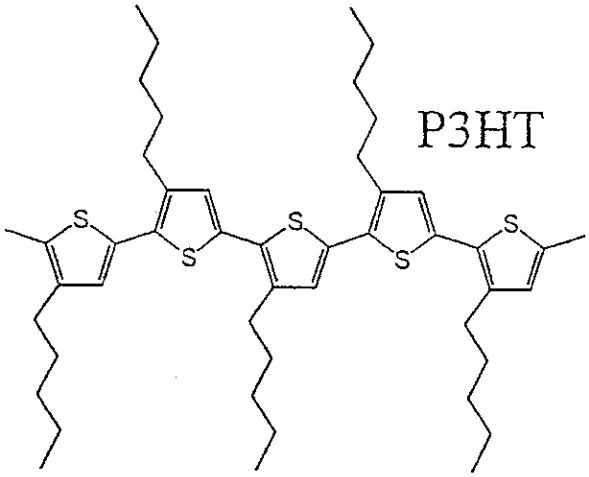


FIG.5



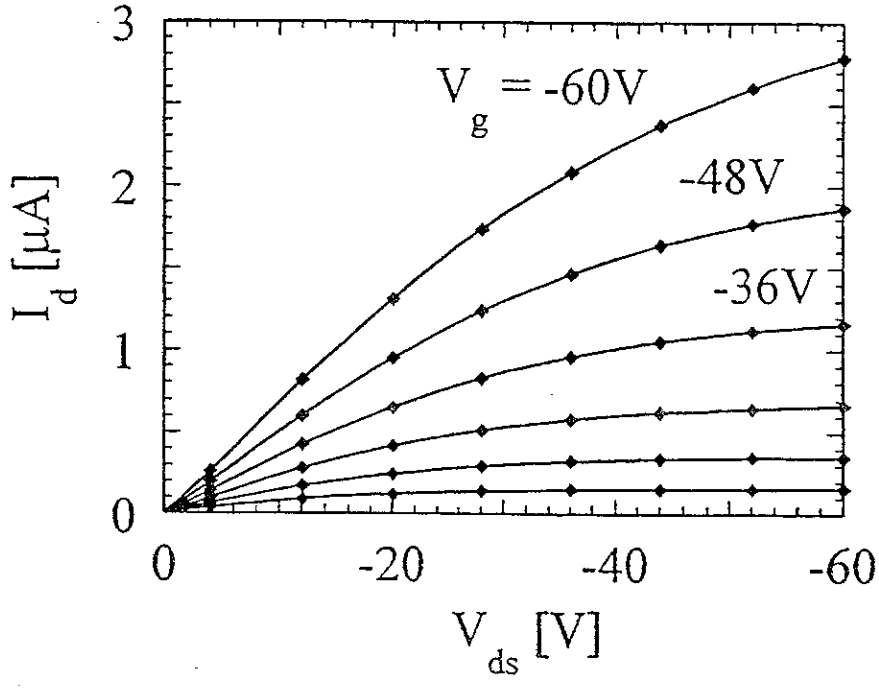
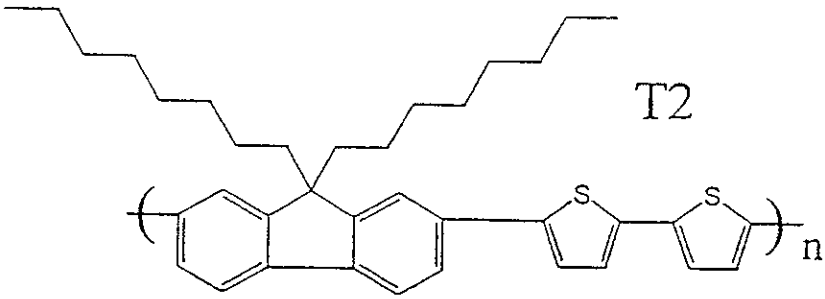
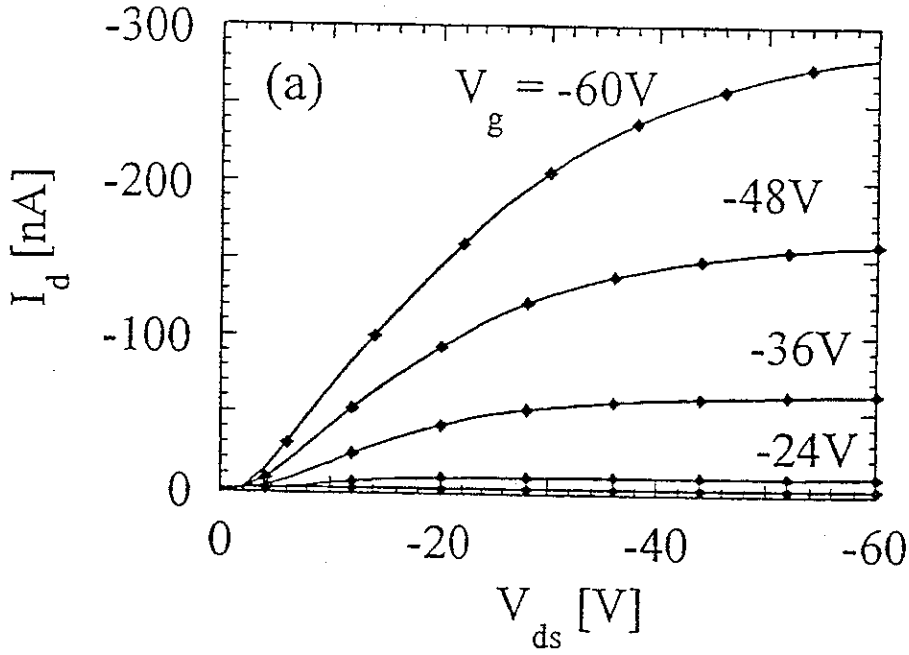


FIG.6


T2
S
S
n


-300
-200
-100
0
(a)
V_g = -60V
-48V
-36V
-24V
I_d [nA]
0
-20
-40
-60
V_{ds} [V]

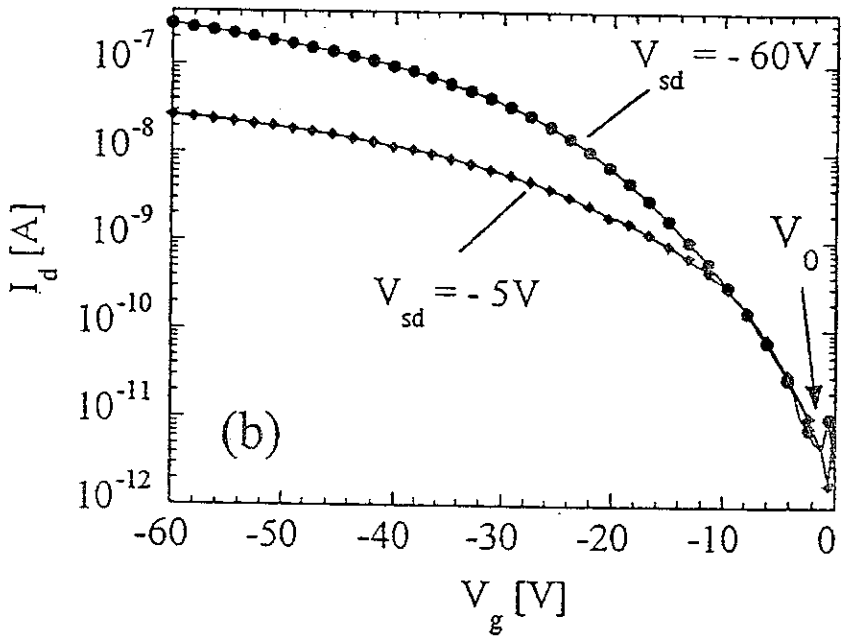
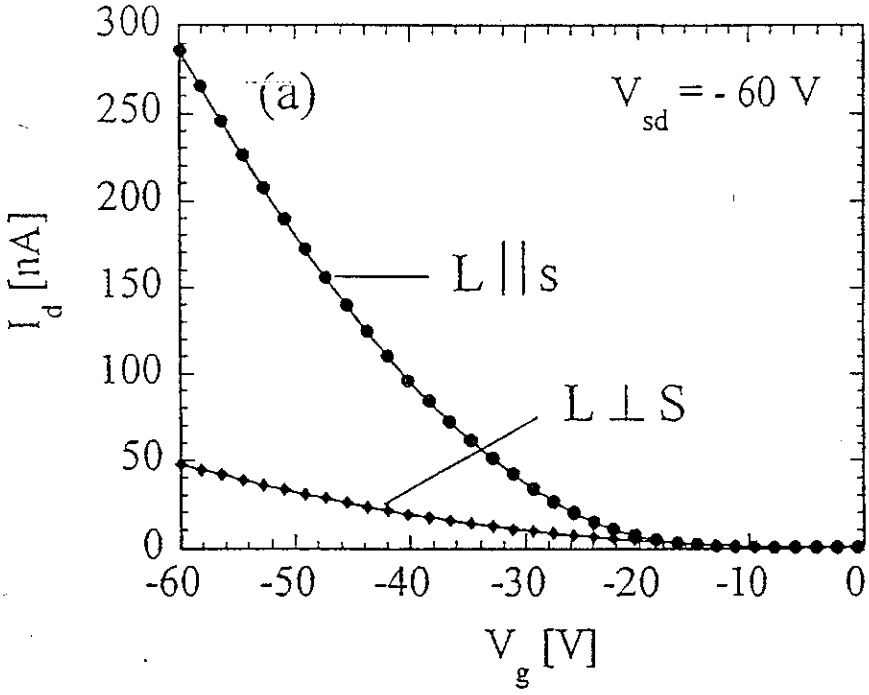
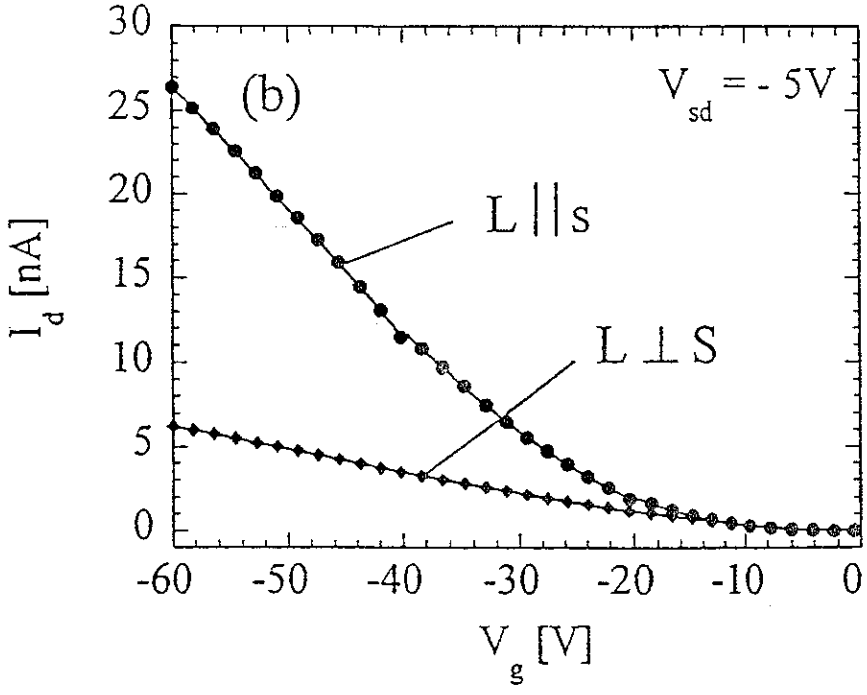

10^{-7}
10^{-8}
10^{-9}
10^{-10}
10^{-11}
10^{-12}
V_{sd} = - 60V
V_{sd} = - 5V
V_0
(b)
I_d [A]
-60
-50
-40
-30
-20
-10
0
V_g [V]

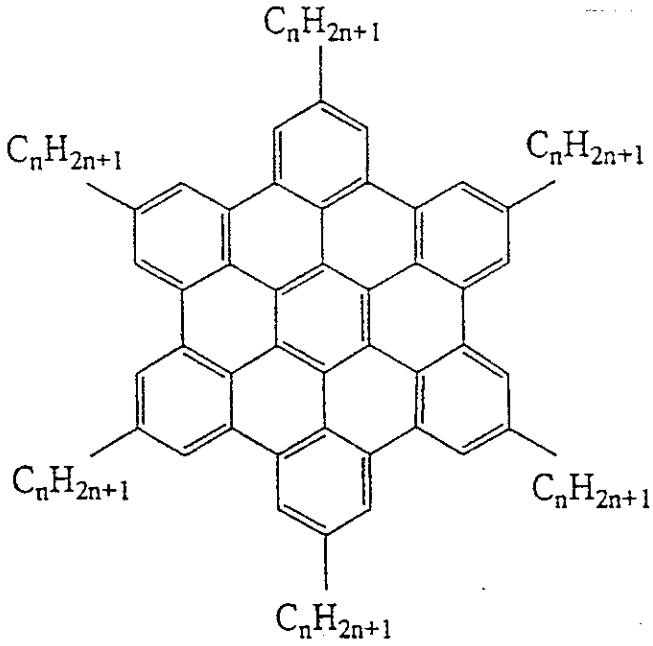
FIG.7


300
250
200
150
100
50
0
(a)
V_{sd} = - 60 V
L || s
L ⊥ S
I_d [nA]
-60
-50
-40
-30
-20
-10
0
V_g [V]


30
25
20
15
10
5
0
(b)
V_{sd} = - 5V
L || s
L ⊥ S
I_d [nA]
-60
-50
-40
-30
-20
-10
0
V_g [V]

13 AUG 2003

FIG.8



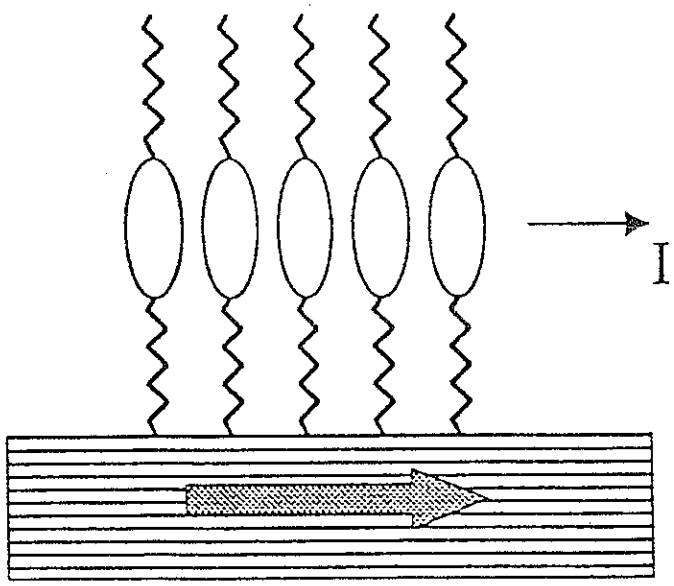
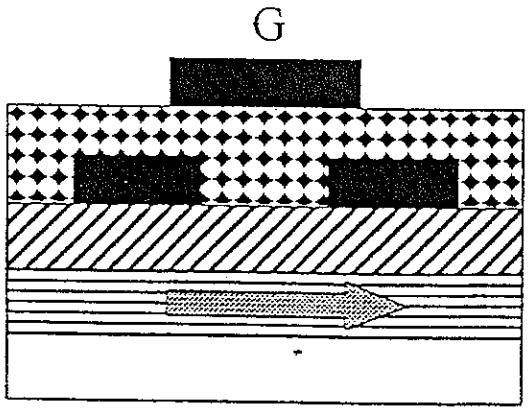
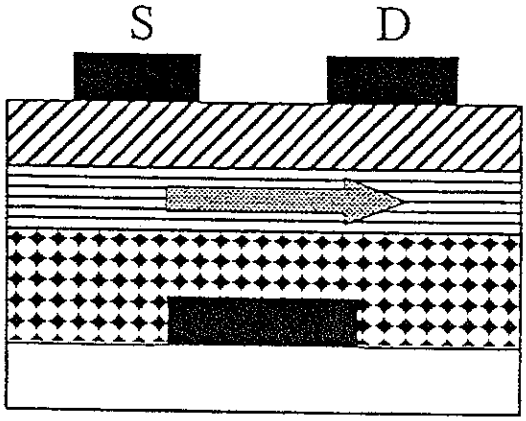


FIG.9

(a)



(b)



(c)

