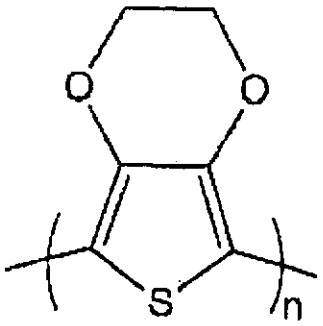


Fig.1a

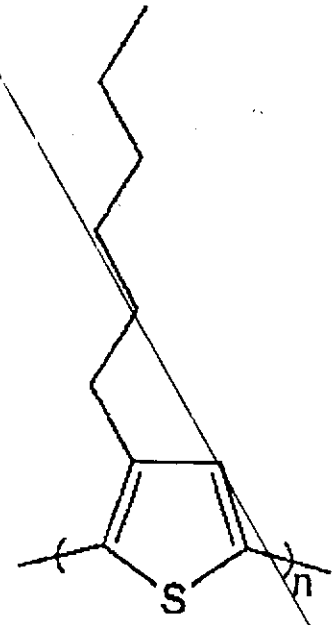


Fig.1b

$R_1 = CH_2CH(C_2H_5)C_4H_9$

$R_2 = CH_3$

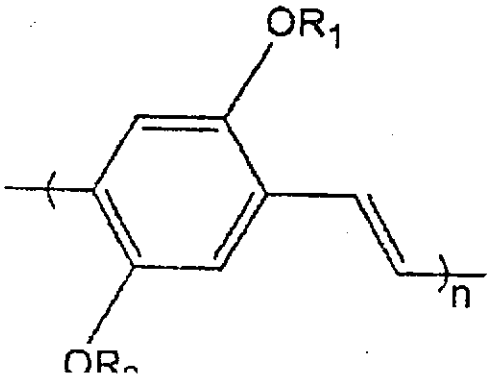


Fig.1c

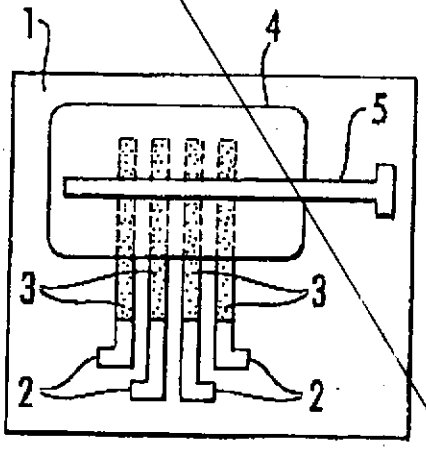


Fig.2a

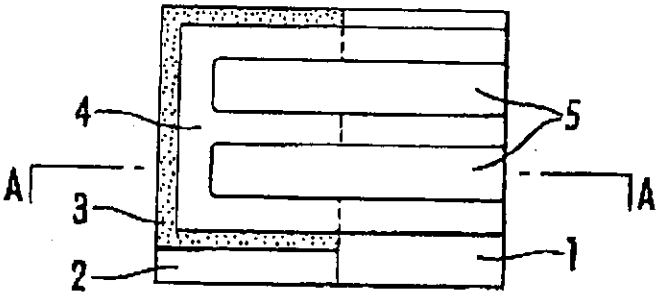


Fig.2b

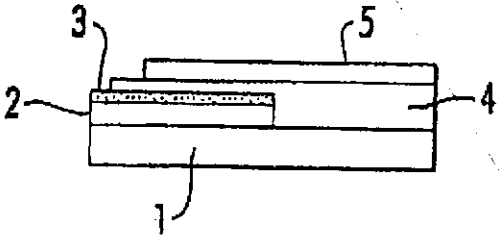


Fig.2c

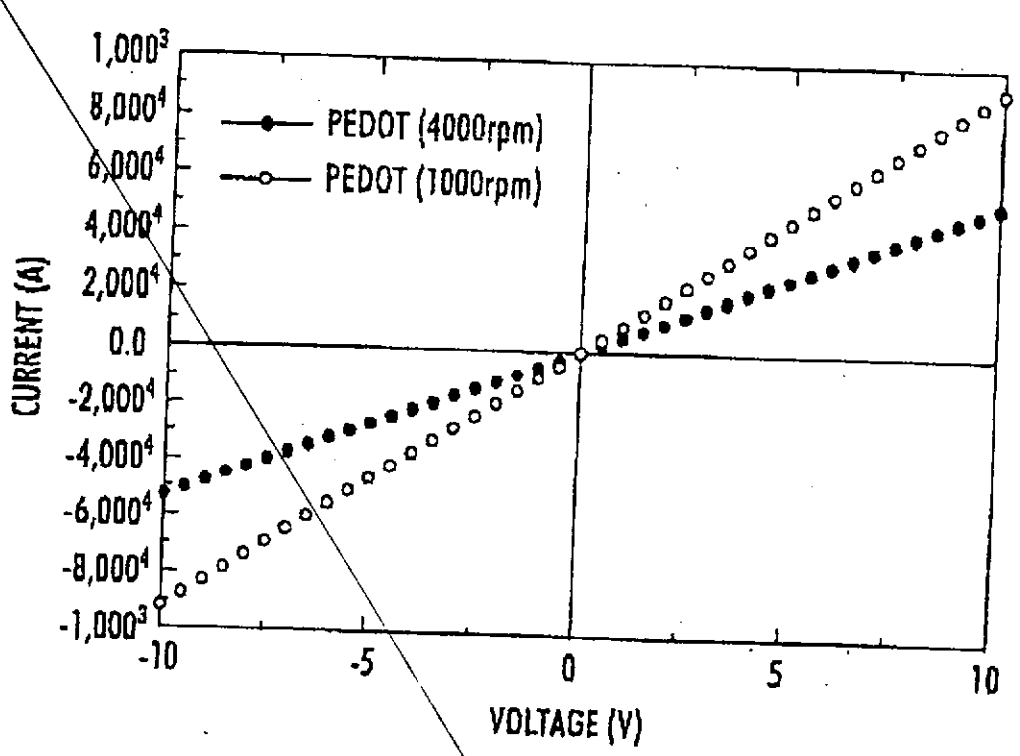

1,000³
8,000⁴
6,000⁴
4,000⁴
2,000⁴
0.0
-2,000⁴
-4,000⁴
-6,000⁴
-8,000⁴
-1,000³
CURRENT (A)
PEDOT (4000rpm)
PEDOT (1000rpm)
-10
-5
0
5
10
VOLTAGE (V)

Fig.3a

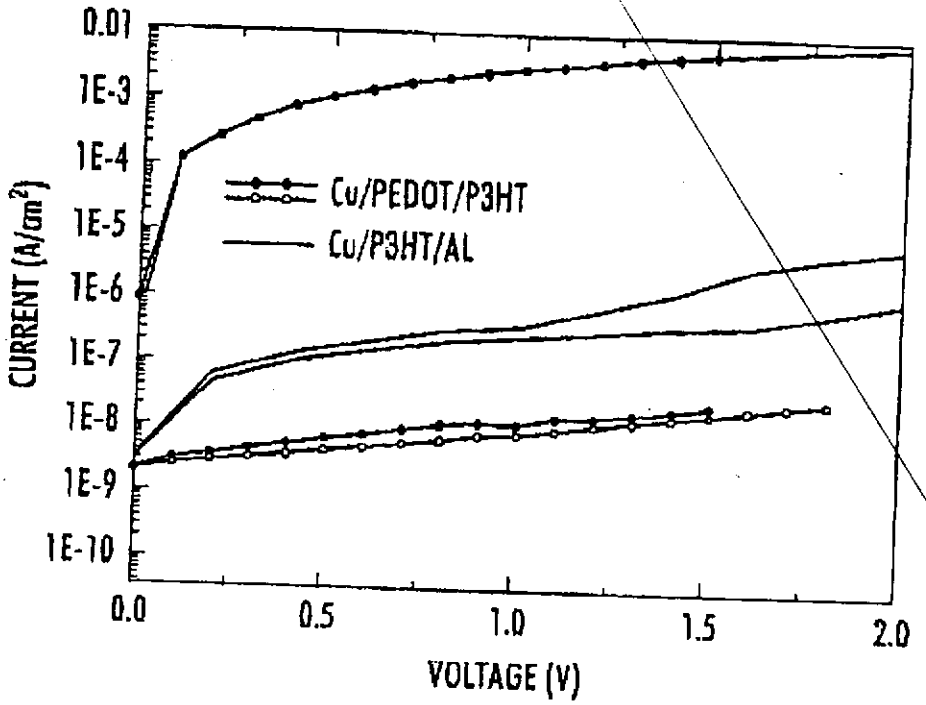

0.01
1E-3
1E-4
1E-5
1E-6
1E-7
1E-8
1E-9
1E-10
CURRENT (A/cm²)
Cu/PEDOT/P3HT
Cu/P3HT/AL
0.0
0.5
1.0
1.5
2.0
VOLTAGE (V)

Fig.3b

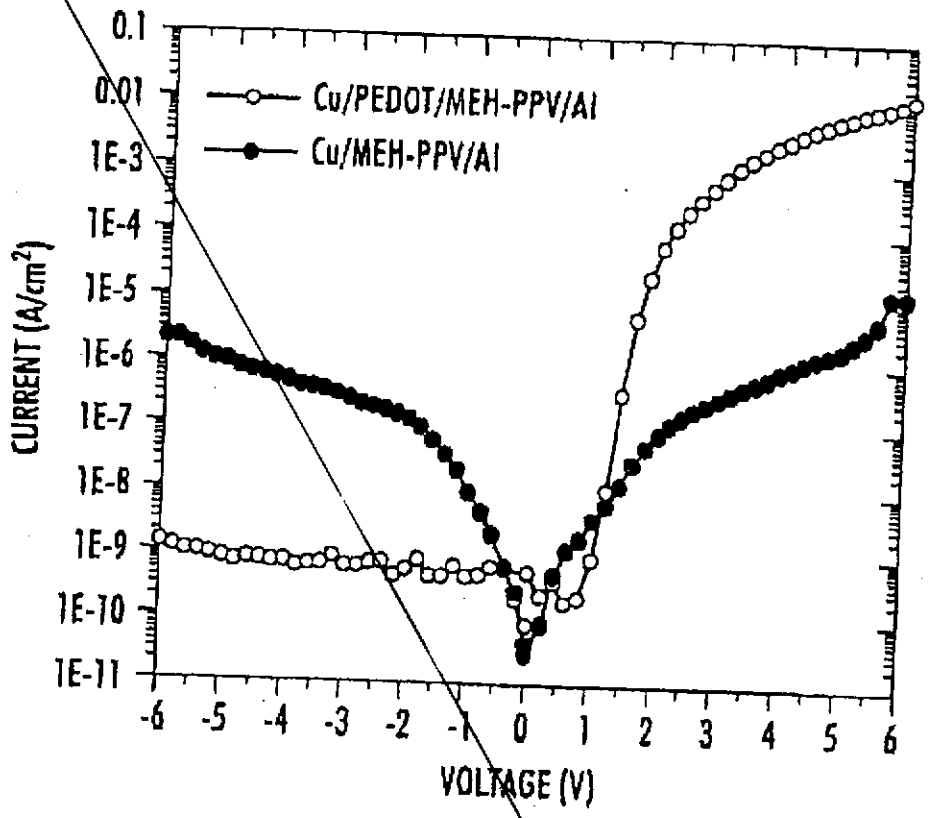

0.1
0.01
1E-3
1E-4
1E-5
1E-6
1E-7
1E-8
1E-9
1E-10
1E-11
CURRENT (A/cm²)
Cu/PEDOT/MEH-PPV/Al
Cu/MEH-PPV/Al
-6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6
VOLTAGE (V)

Fig.3c

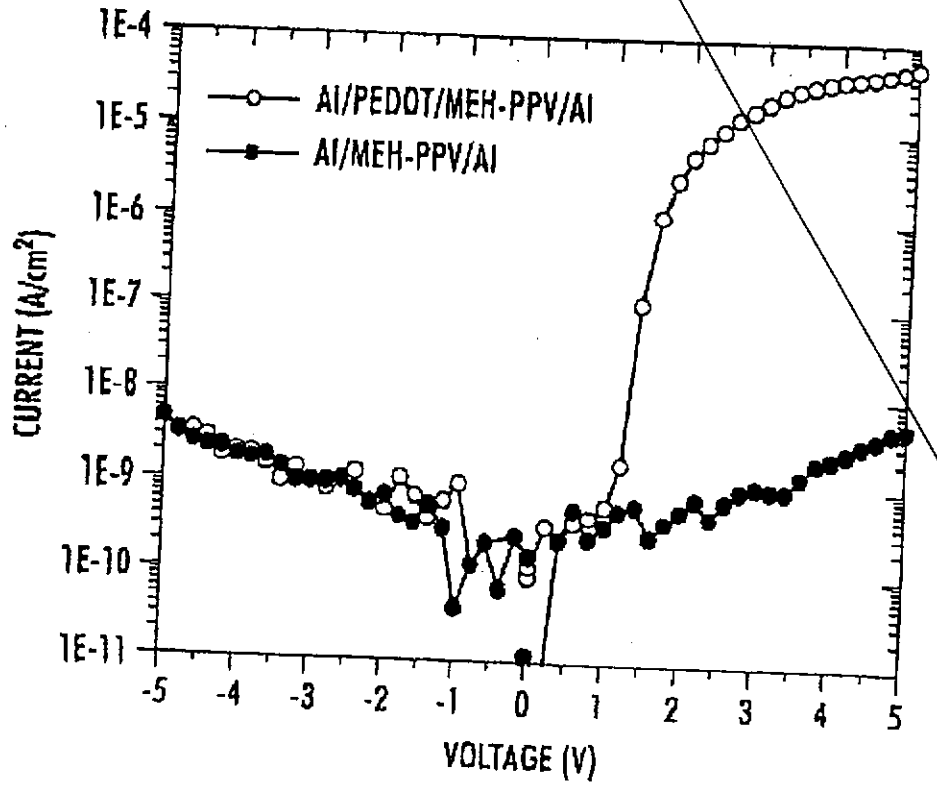

1E-4
1E-5
1E-6
1E-7
1E-8
1E-9
1E-10
1E-11
CURRENT (A/cm²)
Al/PEDOT/MEH-PPV/Al
Al/MEH-PPV/Al
-5 -4 -3 -2 -1 0 1 2 3 4 5
VOLTAGE (V)

Fig.3d

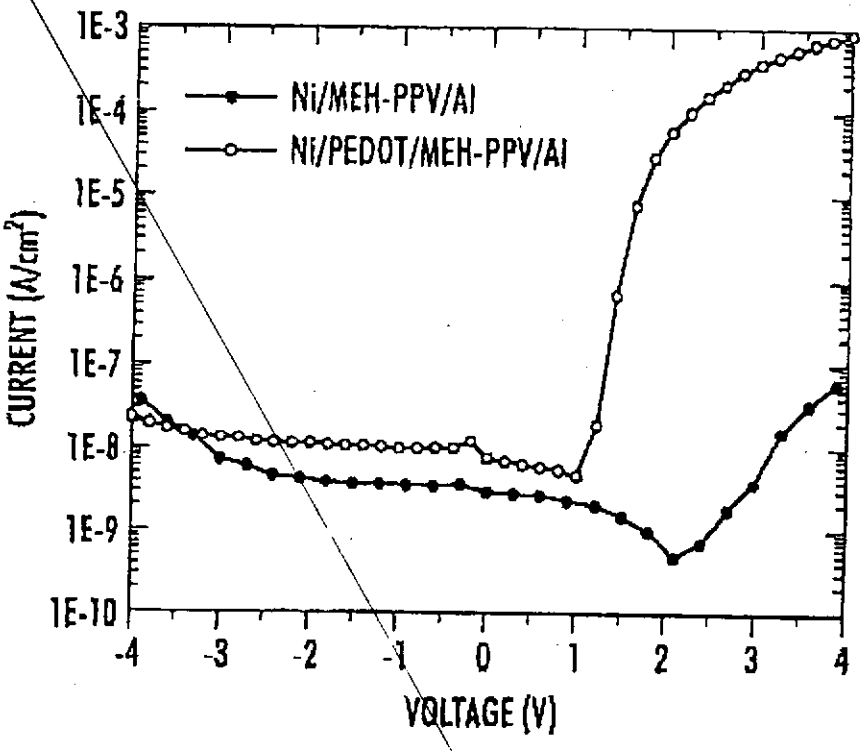

Ni/MEH-PPV/Al
Ni/PEDOT/MEH-PPV/Al
CURRENT (A/cm²)
1E-3
1E-4
1E-5
1E-6
1E-7
1E-8
1E-9
1E-10
-4
-3
-2
-1
0
1
2
3
4
VOLTAGE (V)

Fig.3e

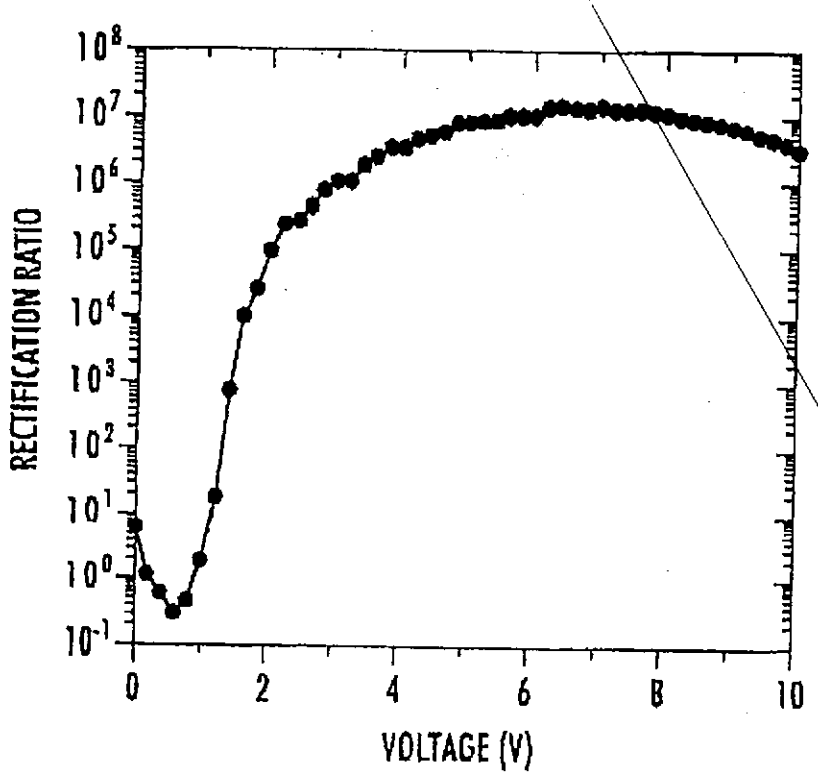

RECTIFICATION RATIO
10⁸
10⁷
10⁶
10⁵
10⁴
10³
10²
10¹
10⁰
10⁻¹
0
2
4
6
8
10
VOLTAGE (V)

Fig.3f

Fig.4

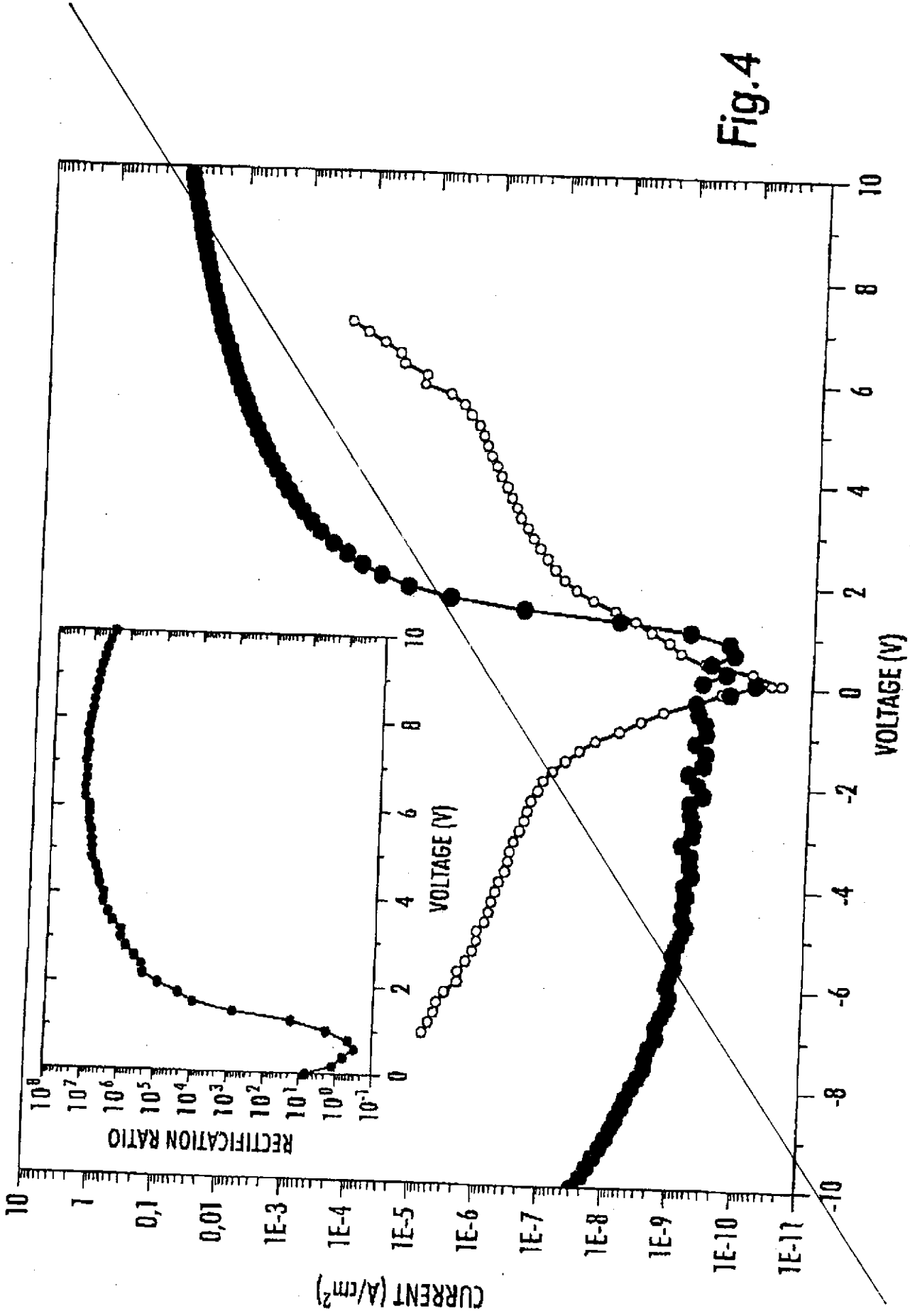

CURRENT (A/cm²)
10
1
0,1
0,01
1E-3
1E-4
1E-5
1E-6
1E-7
1E-8
1E-9
1E-10
1E-11
VOLTAGE (V)
10
8
6
4
2
0
-2
-4
-6
-8
-10
RECTIFICATION RATIO
10^8
10^7
10^6
10^5
10^4
10^3
10^2
10^1
10^0
10^{-1}
VOLTAGE (V)
0
2
4
6
8
10

Fig.5

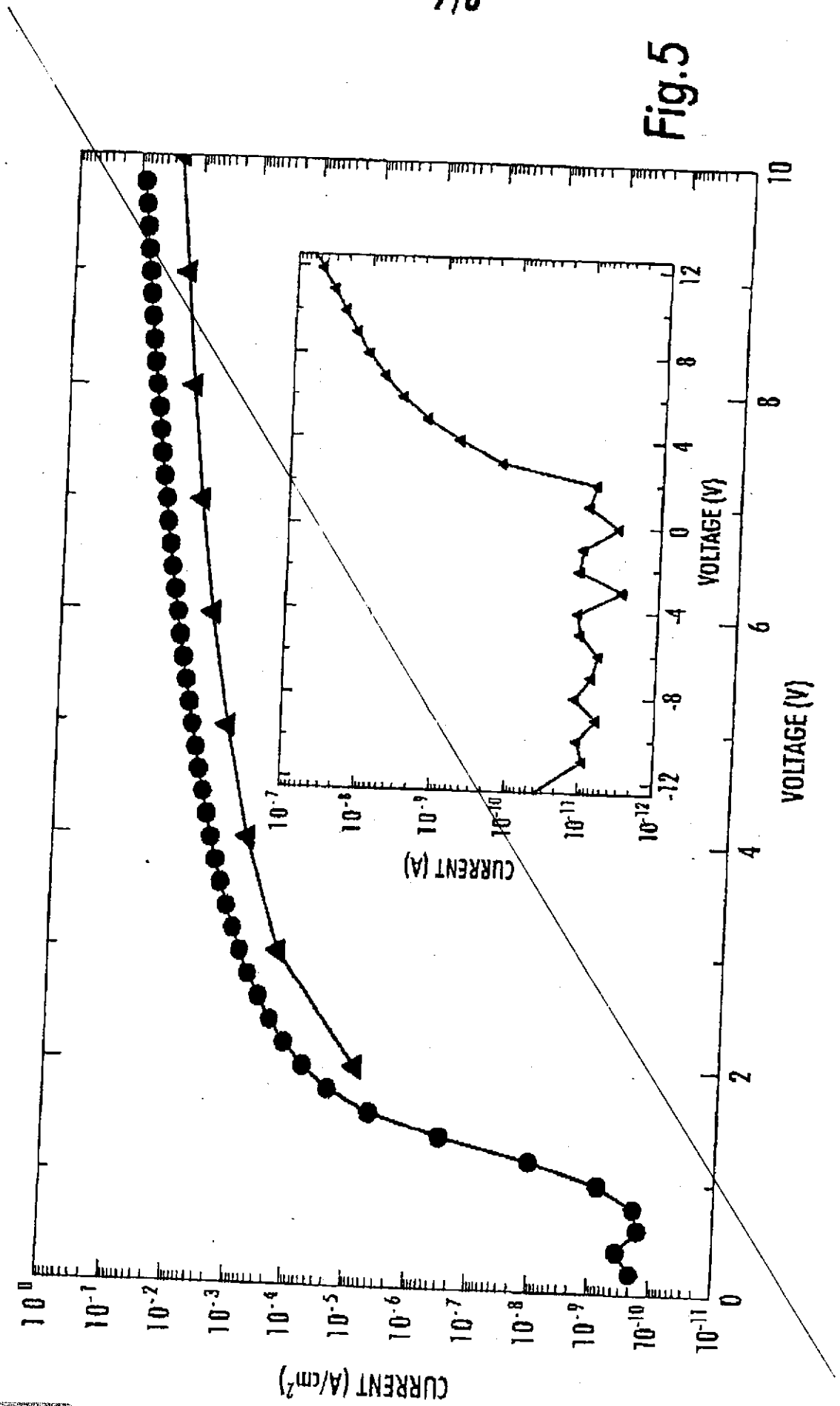
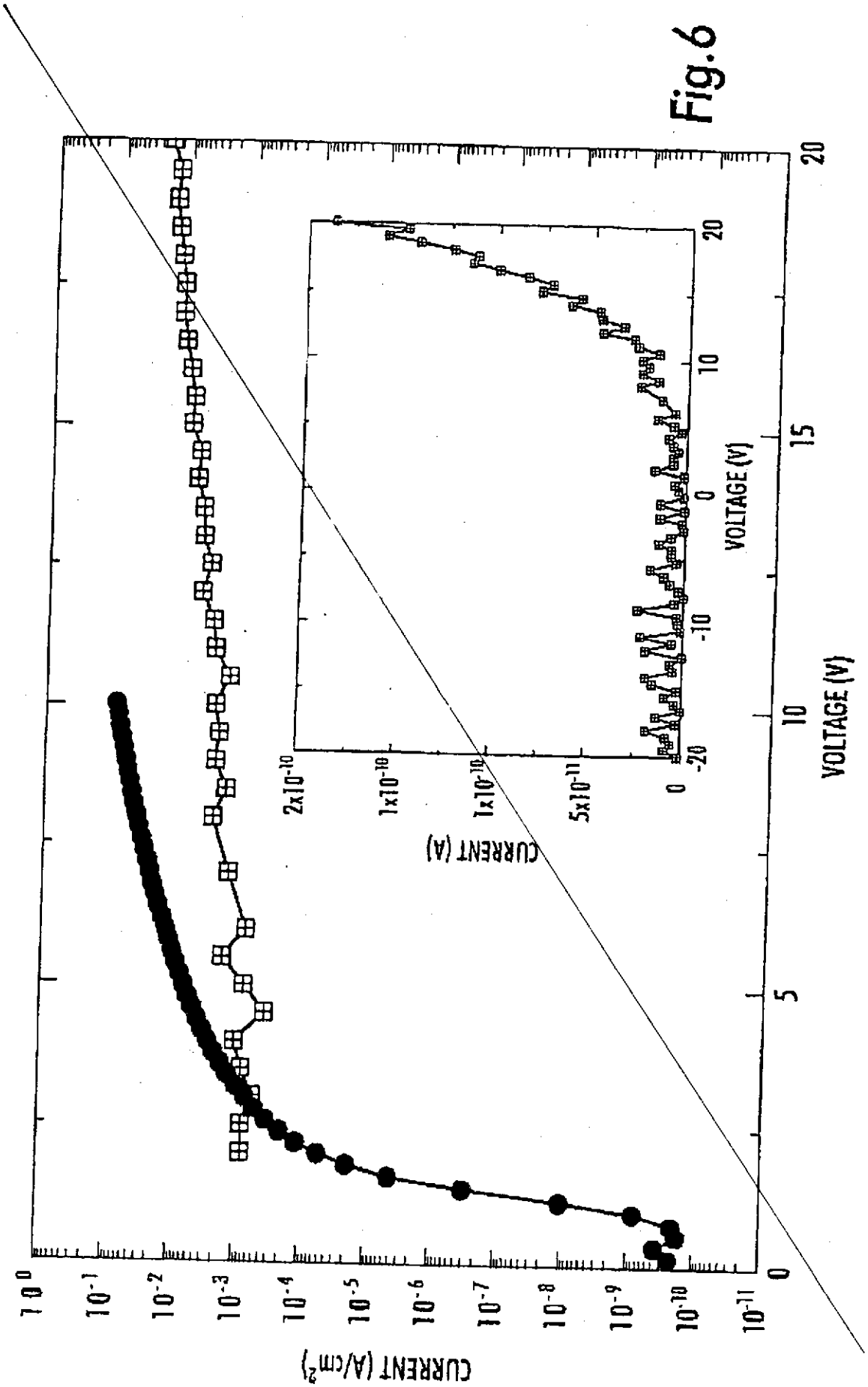


Fig.6



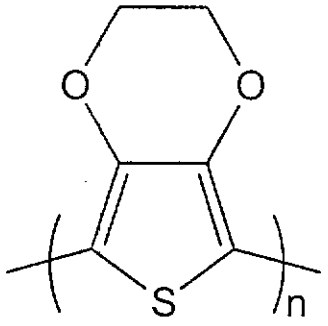


Fig.1a

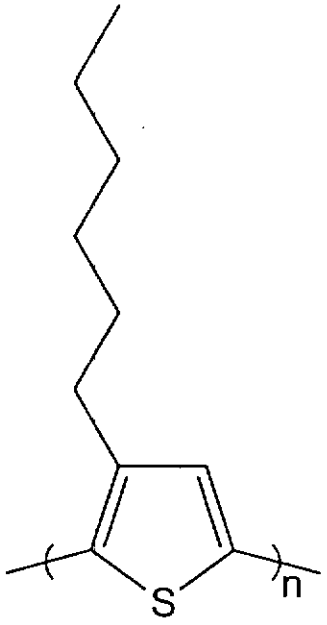


Fig.1b

$R_1 = CH_2CH(C_2H_5)C_4H_9$

$R_2 = CH_3$

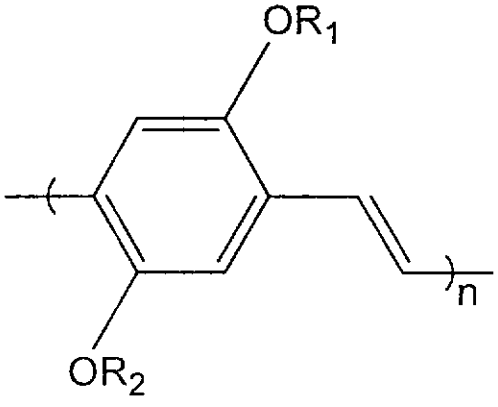


Fig.1c

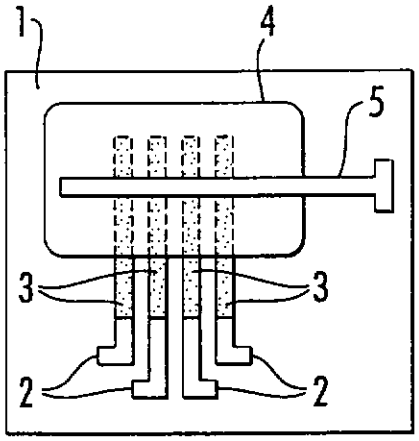


Fig.2a

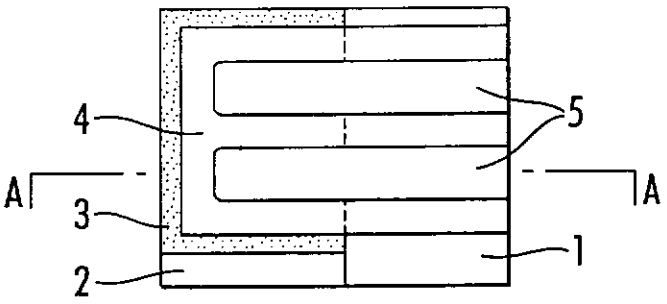


Fig.2b

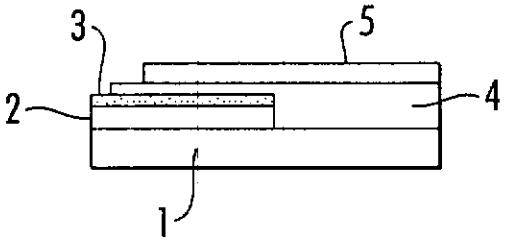


Fig.2c

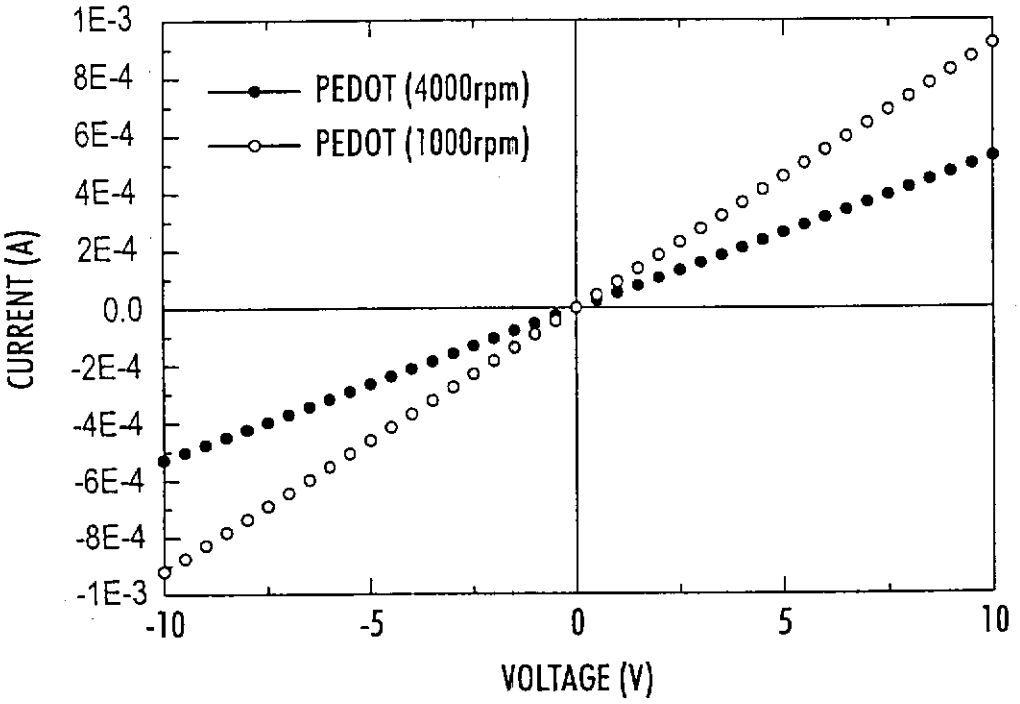

1E-3
8E-4
6E-4
4E-4
2E-4
0.0
-2E-4
-4E-4
-6E-4
-8E-4
-1E-3
CURRENT (A)
PEDOT (4000rpm)
PEDOT (1000rpm)
-10
-5
0
5
10
VOLTAGE (V)

Fig.3a

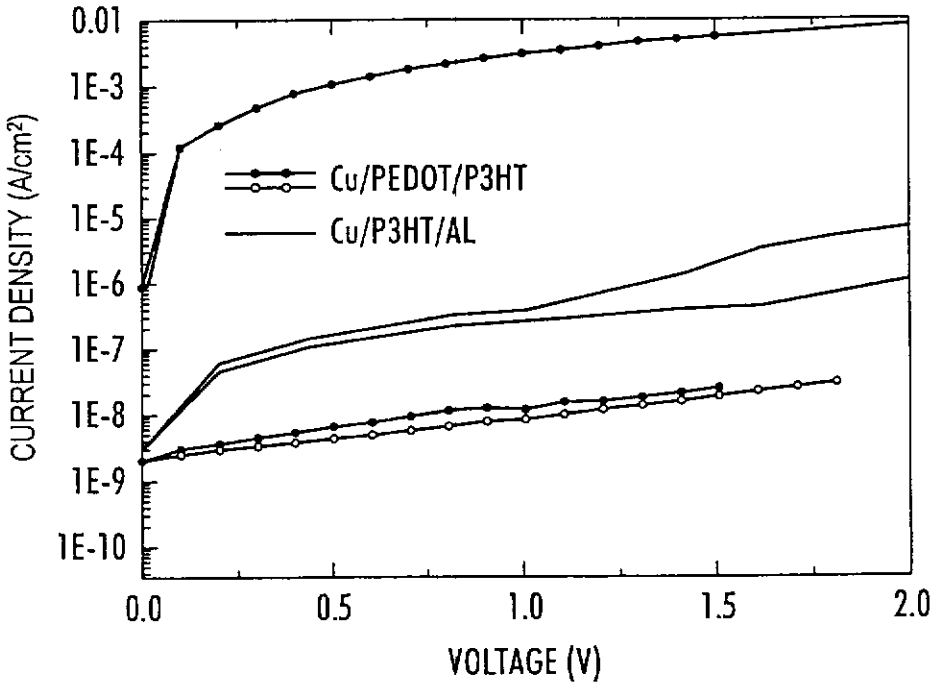

0.01
1E-3
1E-4
1E-5
1E-6
1E-7
1E-8
1E-9
1E-10
CURRENT DENSITY (A/cm²)
Cu/PEDOT/P3HT
Cu/P3HT/AL
0.0
0.5
1.0
1.5
2.0
VOLTAGE (V)

Fig.3b

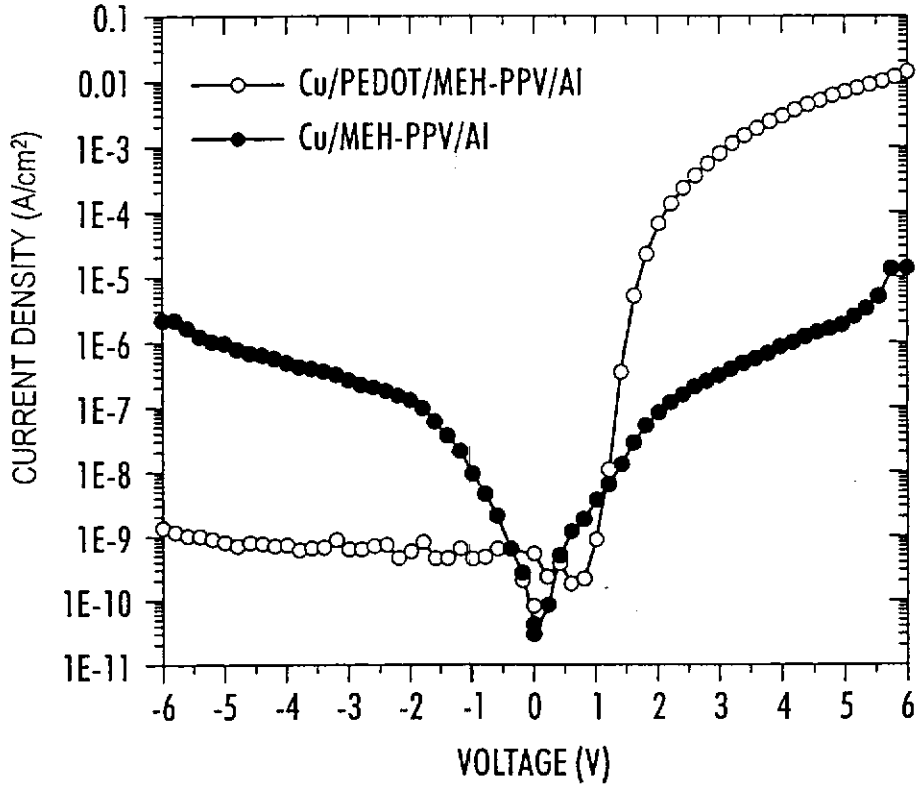

0.1
0.01
1E-3
1E-4
1E-5
1E-6
1E-7
1E-8
1E-9
1E-10
1E-11
CURRENT DENSITY (A/cm²)
Cu/PEDOT/MEH-PPV/Al
Cu/MEH-PPV/Al
-6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6
VOLTAGE (V)

Fig.3c

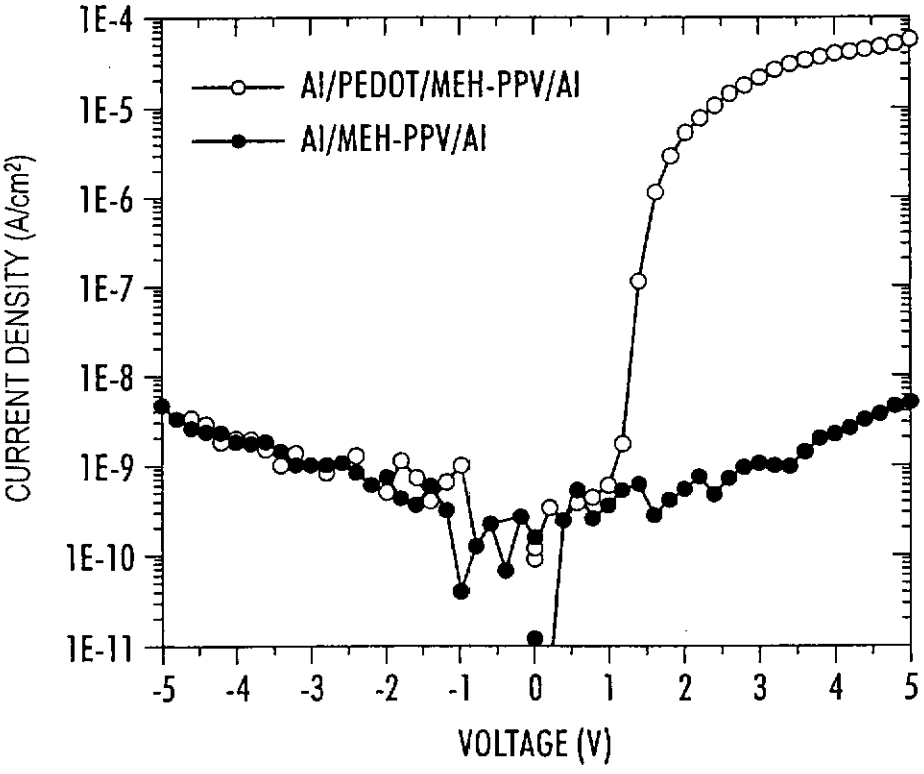

1E-4
1E-5
1E-6
1E-7
1E-8
1E-9
1E-10
1E-11
CURRENT DENSITY (A/cm²)
Al/PEDOT/MEH-PPV/Al
Al/MEH-PPV/Al
-5 -4 -3 -2 -1 0 1 2 3 4 5
VOLTAGE (V)

Fig.3d

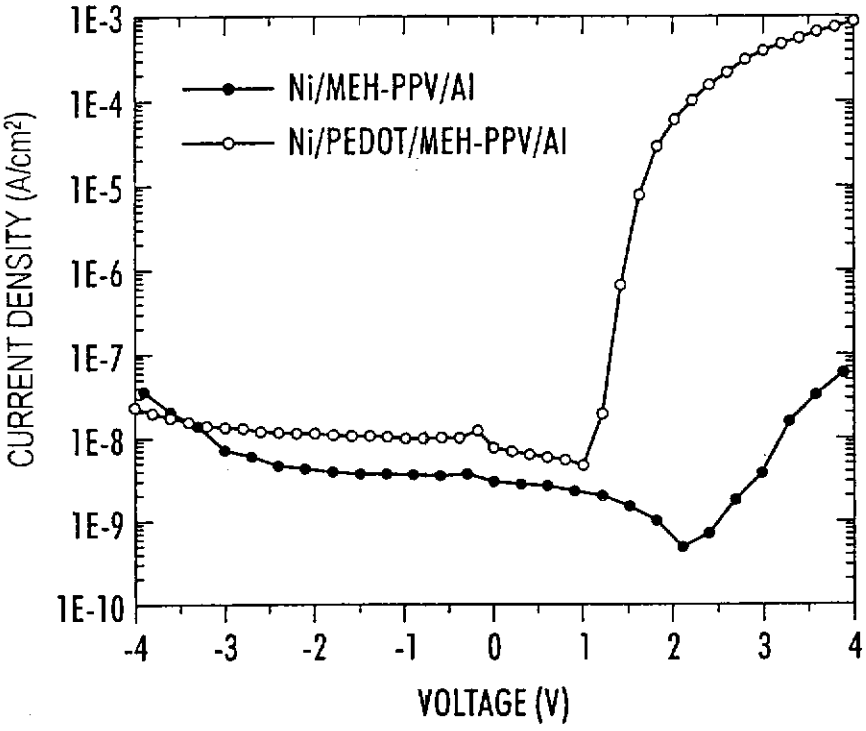

1E-3
1E-4
1E-5
1E-6
1E-7
1E-8
1E-9
1E-10
CURRENT DENSITY (A/cm²)
Ni/MEH-PPV/Al
Ni/PEDOT/MEH-PPV/Al
-4
-3
-2
-1
0
1
2
3
4
VOLTAGE (V)

Fig.3e

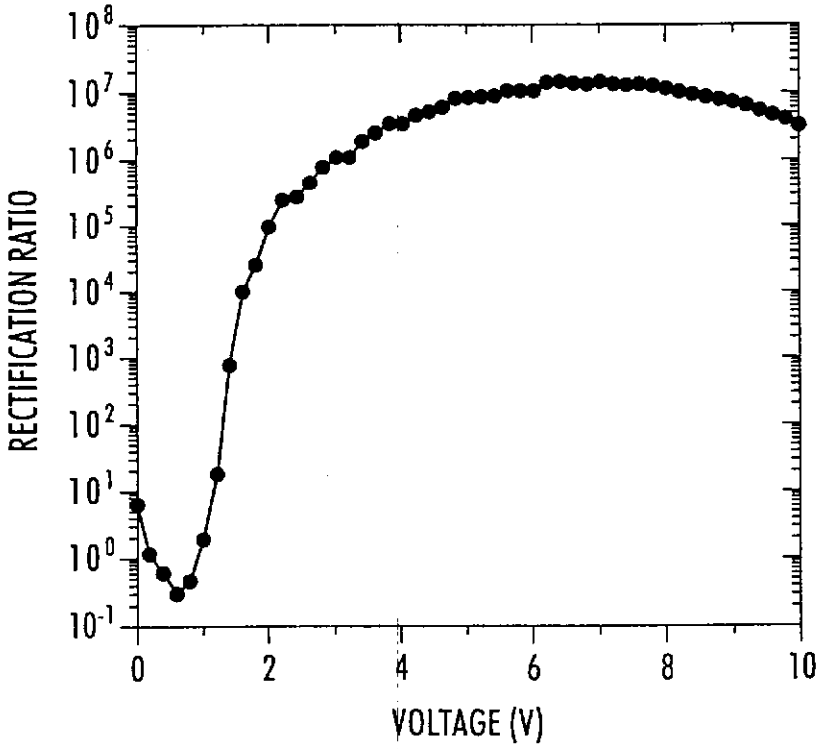

10⁸
10⁷
10⁶
10⁵
10⁴
10³
10²
10¹
10⁰
10⁻¹
RECTIFICATION RATIO
0
2
4
6
8
10
VOLTAGE (V)

Fig.3f

Fig.4

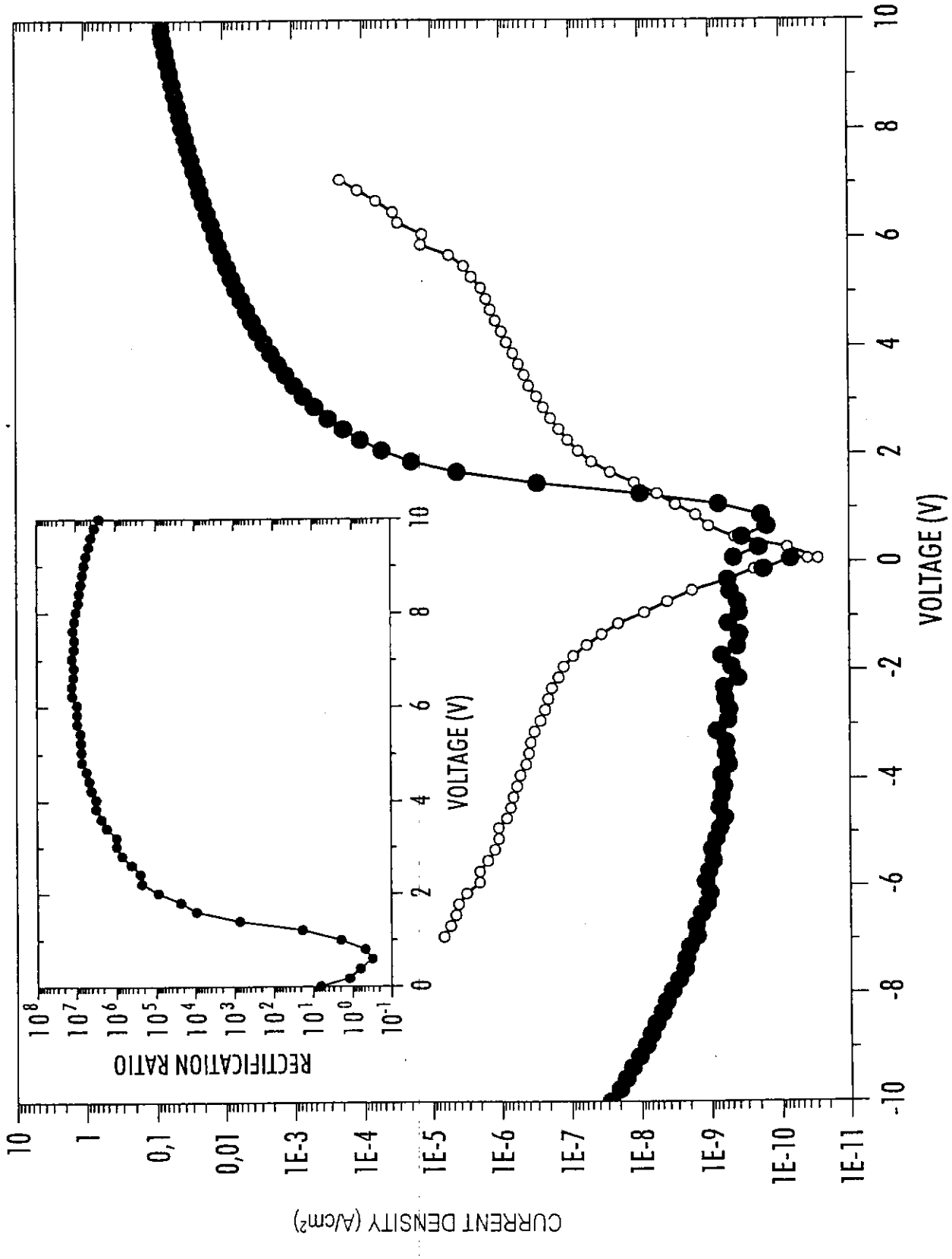

CURRENT DENSITY (A/cm²)
10
1
0,1
0,01
1E-3
1E-4
1E-5
1E-6
1E-7
1E-8
1E-9
1E-10
1E-11
-10
-8
-6
-4
-2
0
2
4
6
8
10
VOLTAGE (V)
RECTIFICATION RATIO
10^8
10^7
10^6
10^5
10^4
10^3
10^2
10^1
10^0
10^{-1}
0
2
4
6
8
10
VOLTAGE (V)

Fig.5

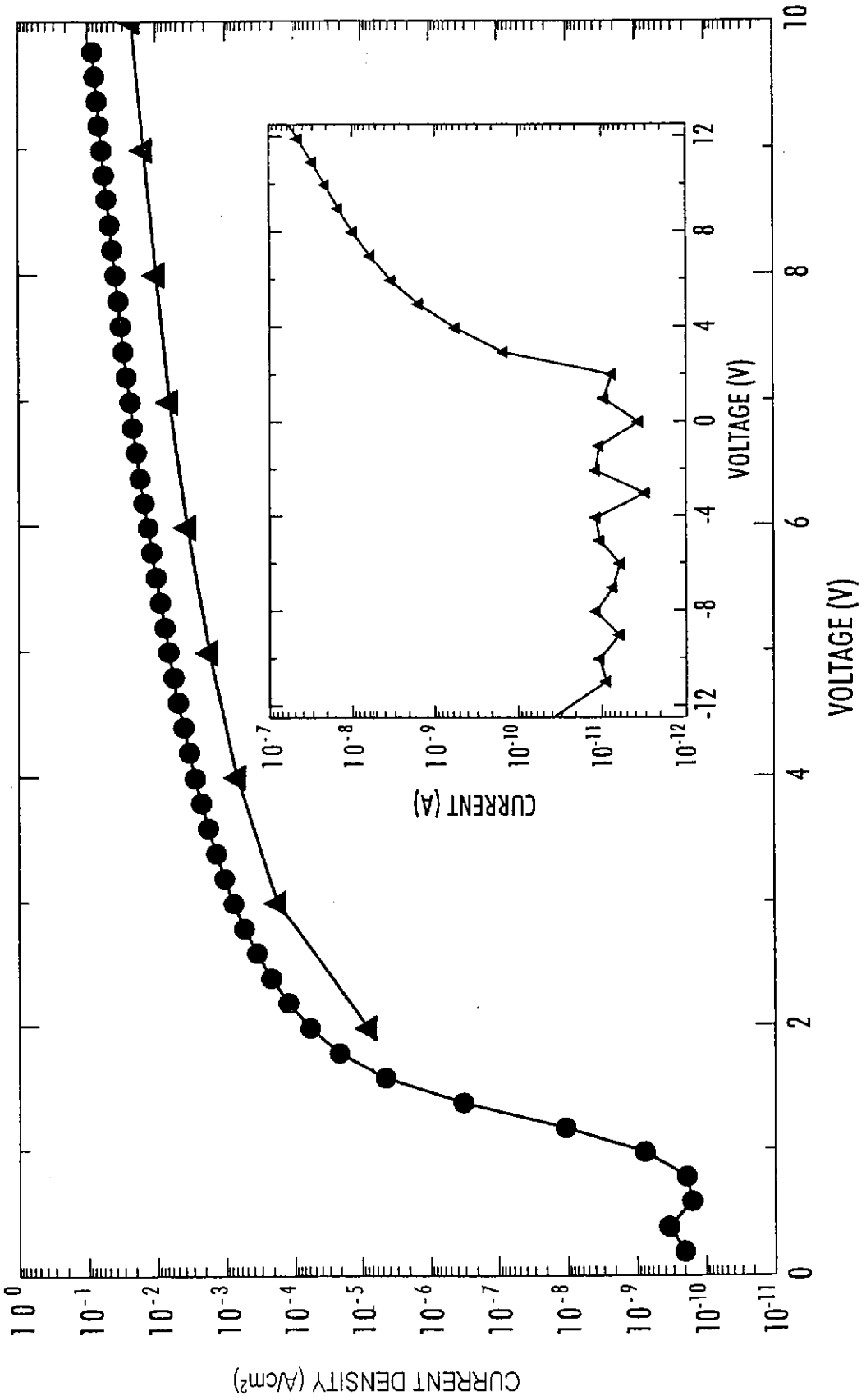


Fig.6

