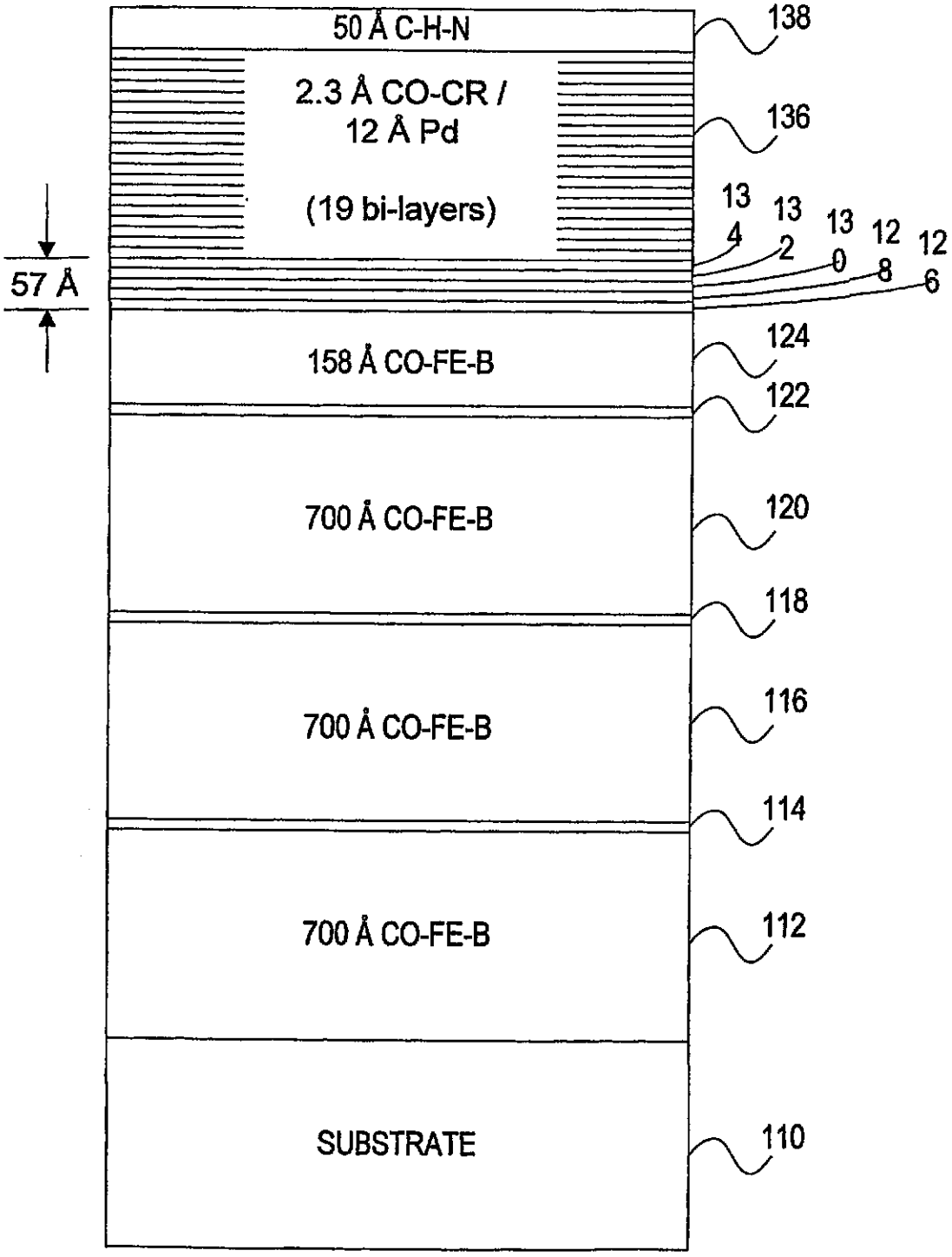

FIG. 1 (PRIOR ART)

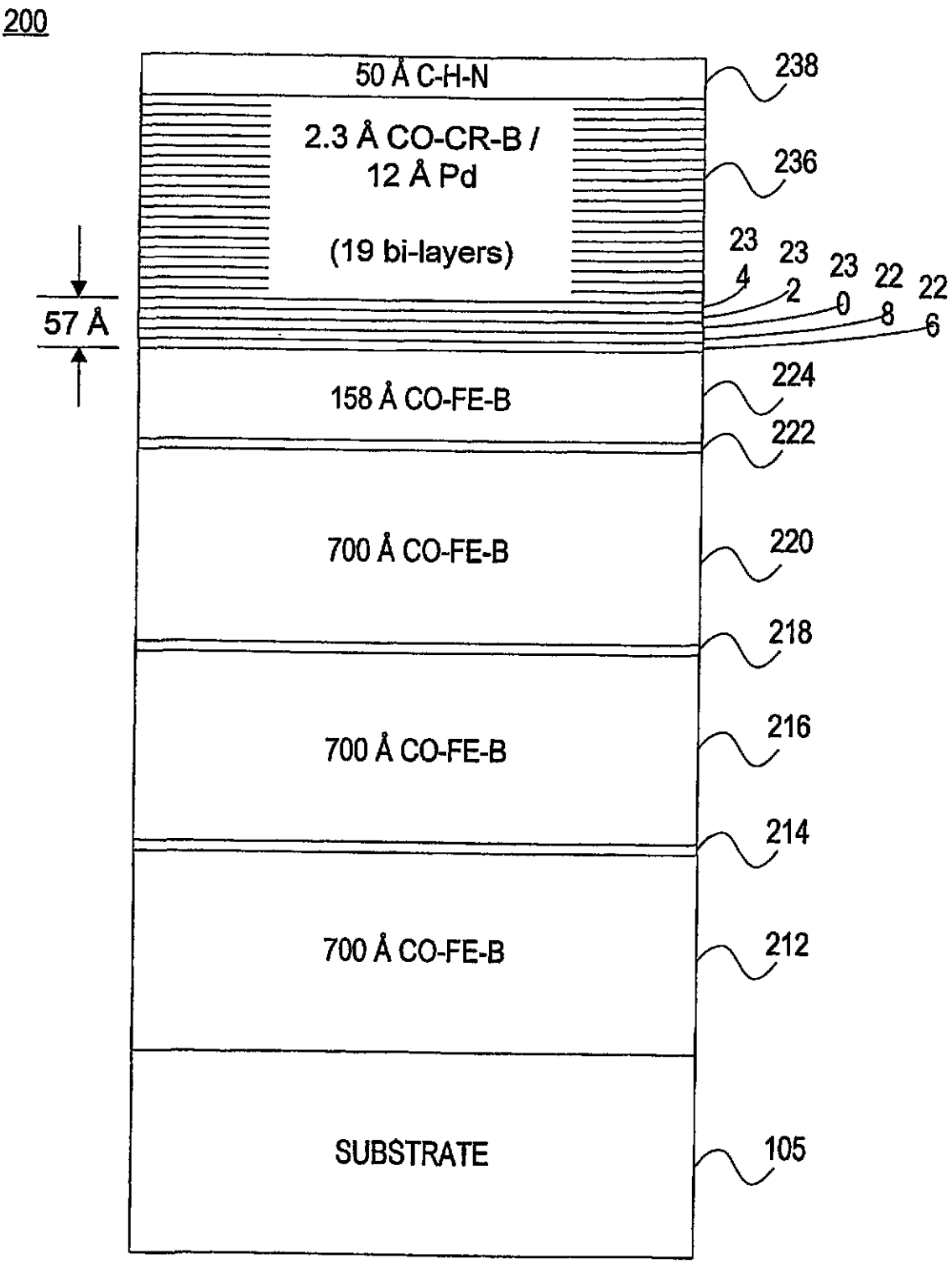
200
50 Å C-H-N
238
2.3 Å CO-CR-B /
12 Å Pd
236
(19 bi-layers)
57 Å
234
232
230
228
226
158 Å CO-FE-B
224
222
700 Å CO-FE-B
220
218
700 Å CO-FE-B
216
214
700 Å CO-FE-B
212
SUBSTRATE
105

FIG. 2

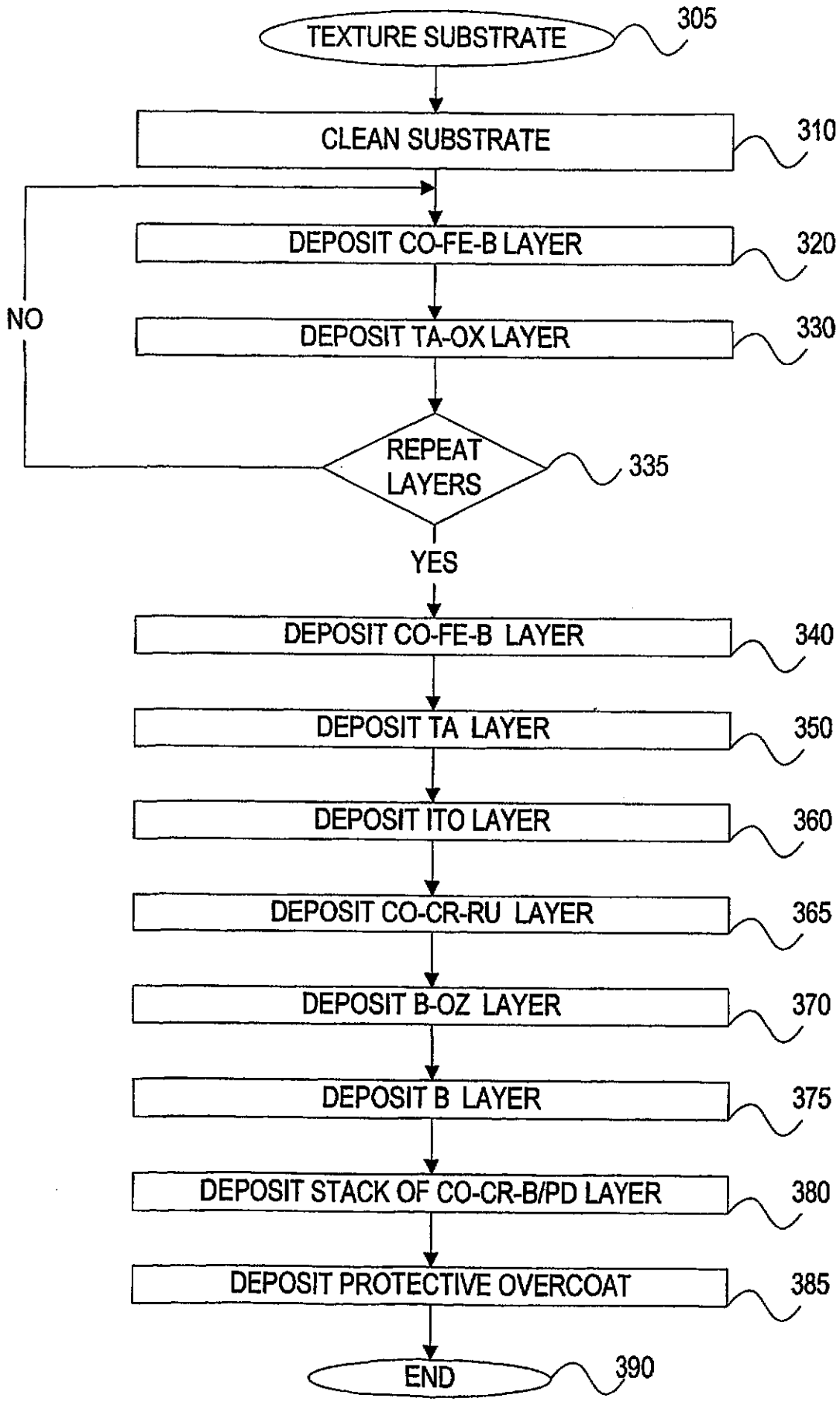
TEXTURE SUBSTRATE
305
CLEAN SUBSTRATE
310
DEPOSIT CO-FE-B LAYER
320
NO
DEPOSIT TA-OX LAYER
330
REPEAT LAYERS
335
YES
DEPOSIT CO-FE-B LAYER
340
DEPOSIT TA LAYER
350
DEPOSIT ITO LAYER
360
DEPOSIT CO-CR-RU LAYER
365
DEPOSIT B-OZ LAYER
370
DEPOSIT B LAYER
375
DEPOSIT STACK OF CO-CR-B/PD LAYER
380
DEPOSIT PROTECTIVE OVERCOAT
385
END
390

FIG. 3

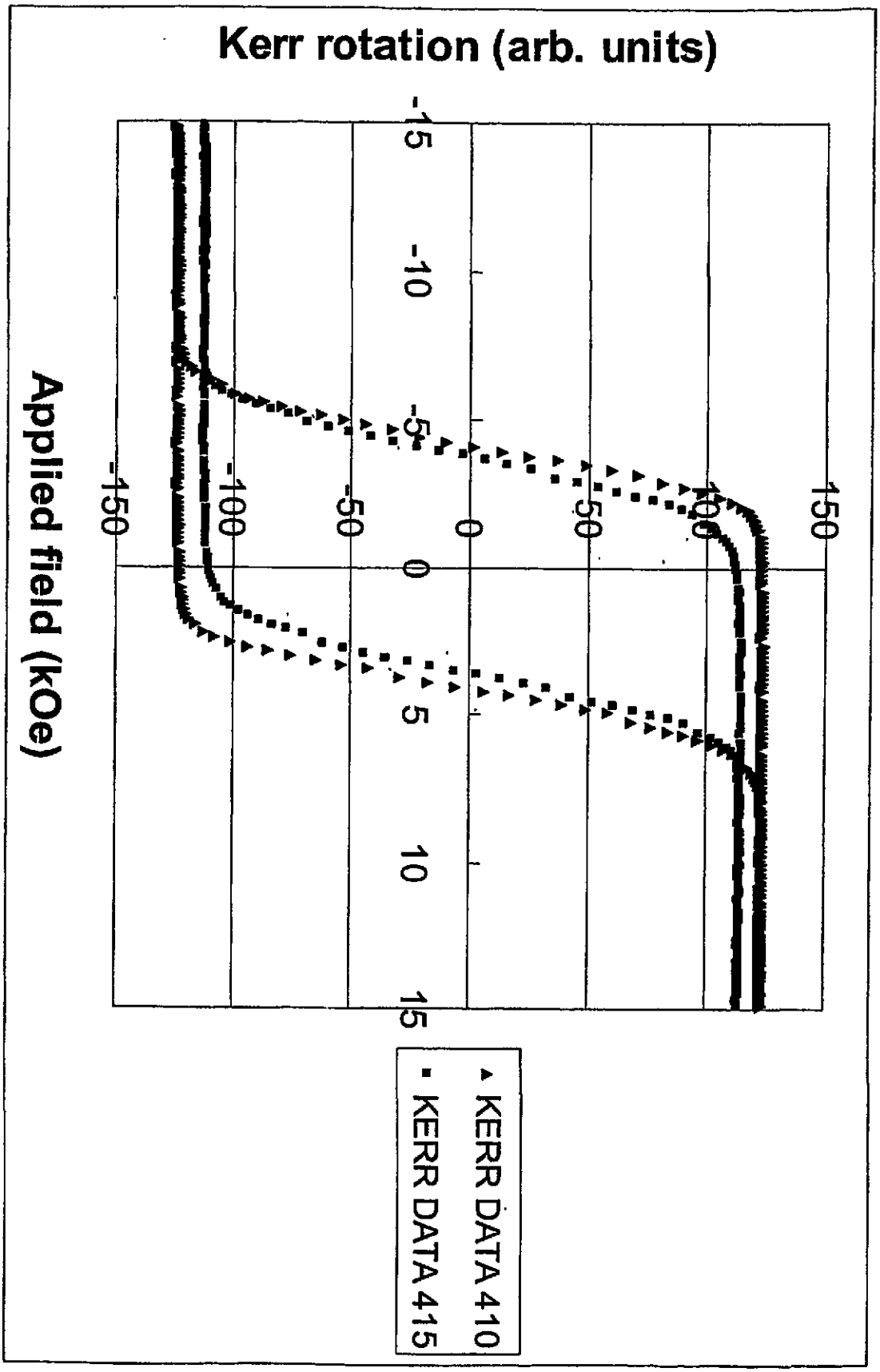
Kerr rotation (arb. units)
Applied field (kOe)
-15
-10
-5
0
5
10
15
-150
-100
-50
0
50
100
150
KERR DATA 410
KERR DATA 415

FIG. 4

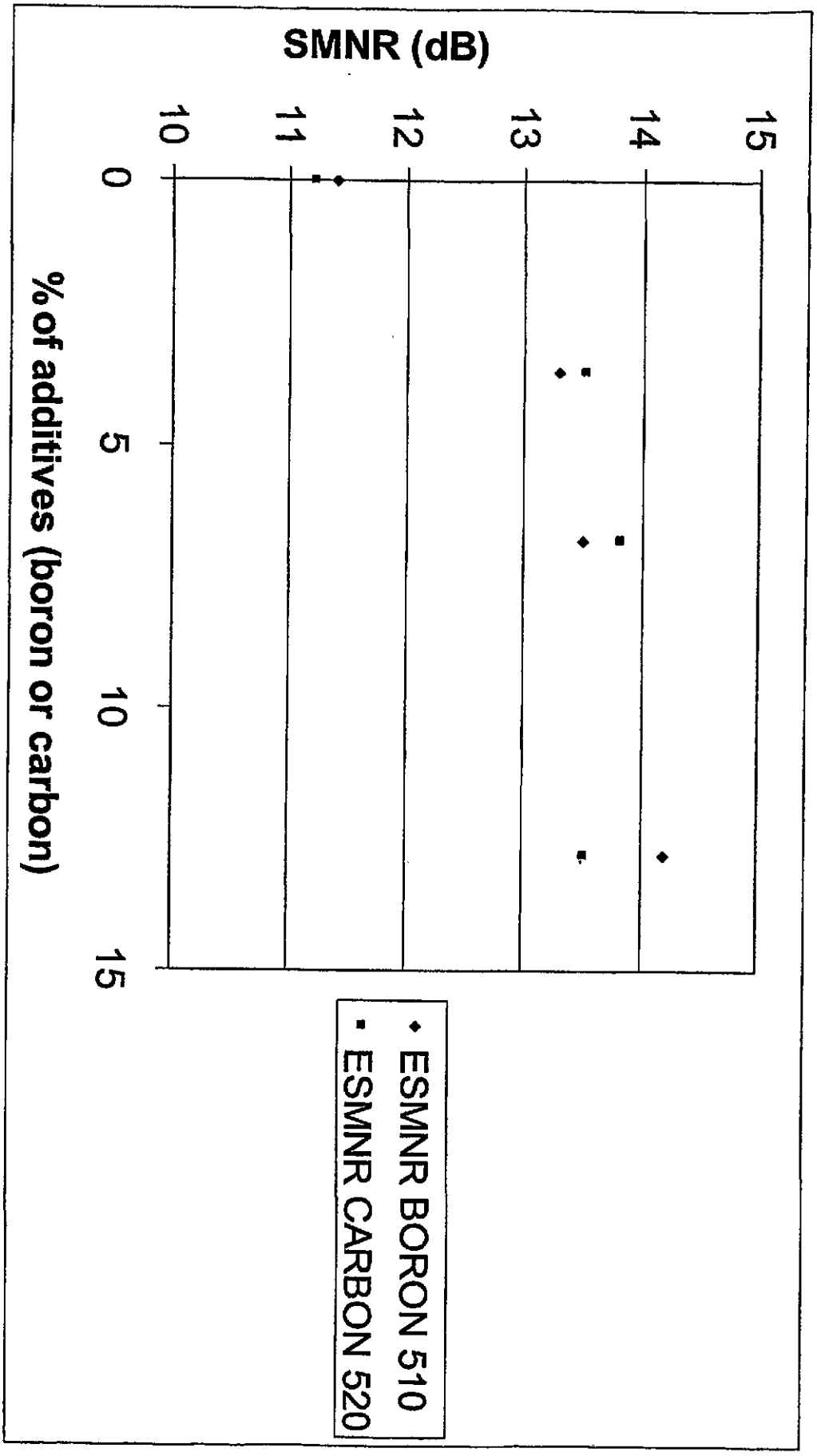
SMNR (dB)
10
11
12
13
14
15
0
5
10
15
% of additives (boron or carbon)
ESMNR BORON 510
ESMNR CARBON 520

FIG. 5

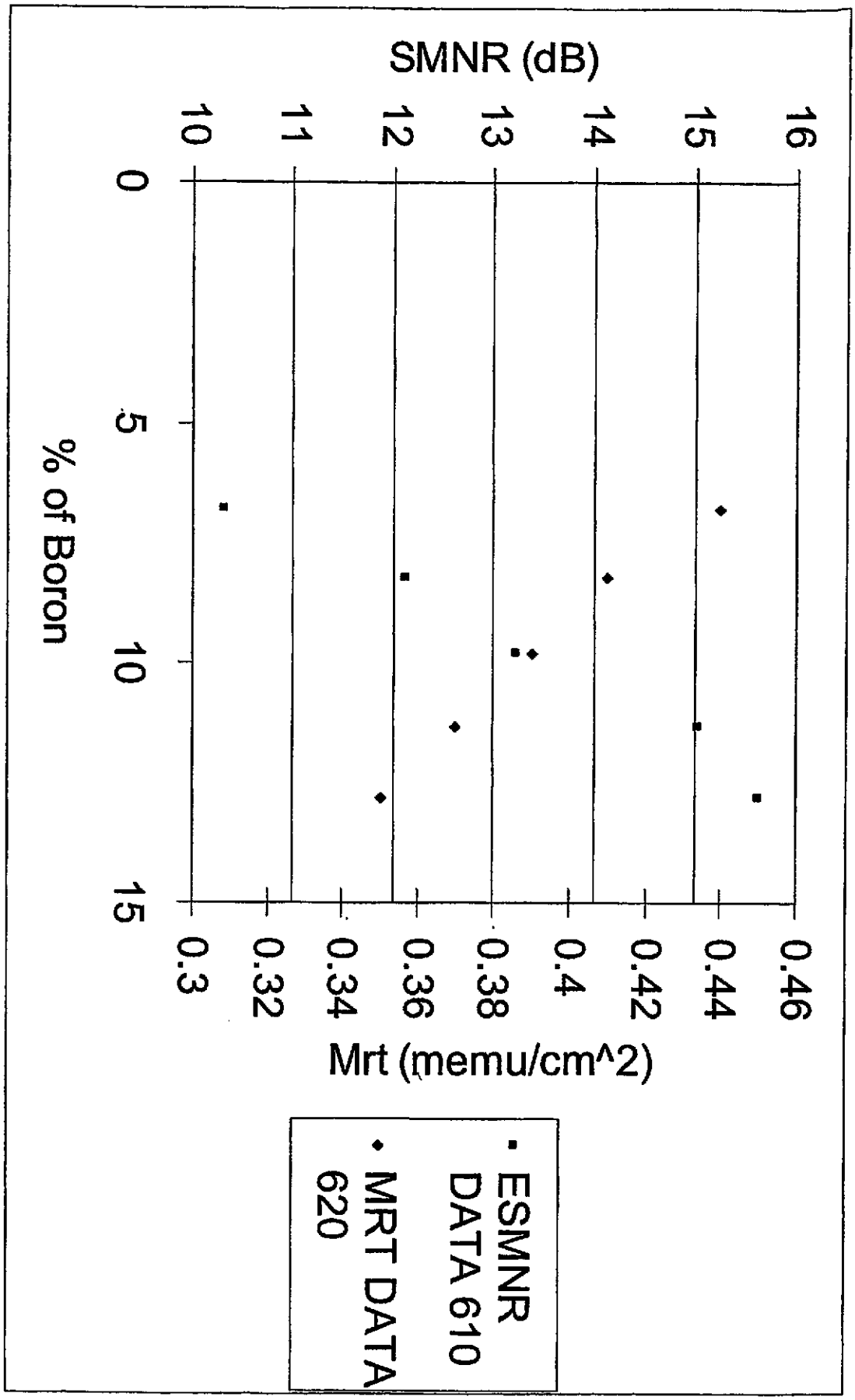
SMNR (dB)
10
11
12
13
14
15
16
0
5
10
15
% of Boron
0.3
0.32
0.34
0.36
0.38
0.4
0.42
0.44
0.46
Mrt (memu/cm^2)
ESMNR DATA 610
MRT DATA 620

FIG. 6

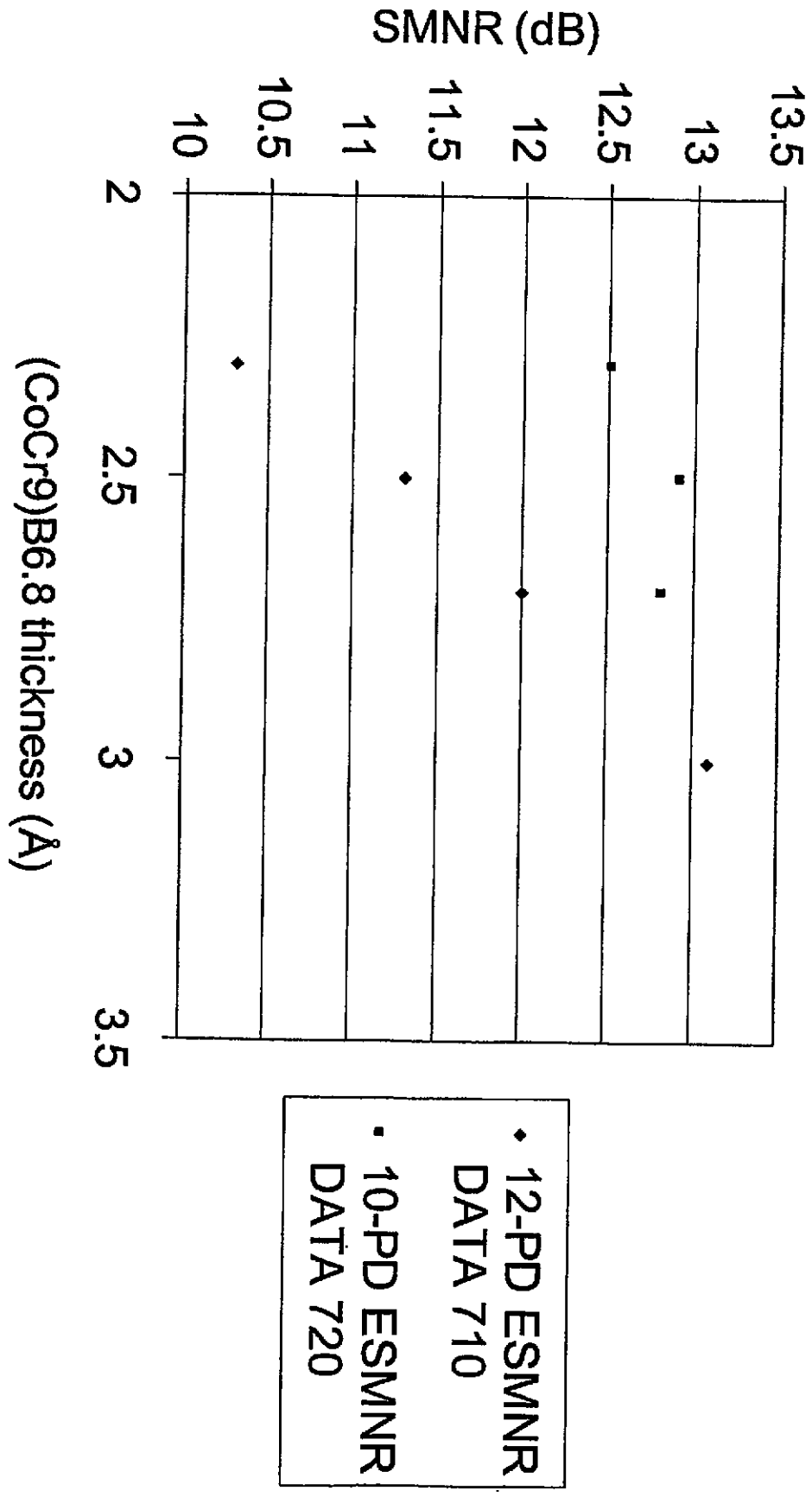
SMNR (dB)
10
10.5
11
11.5
12
12.5
13
13.5
2
2.5
3
3.5
(CoCr9)B6.8 thickness (Å)
◆ 12-PD ESMNR DATA 710
▪ 10-PD ESMNR DATA 720

FIG. 7

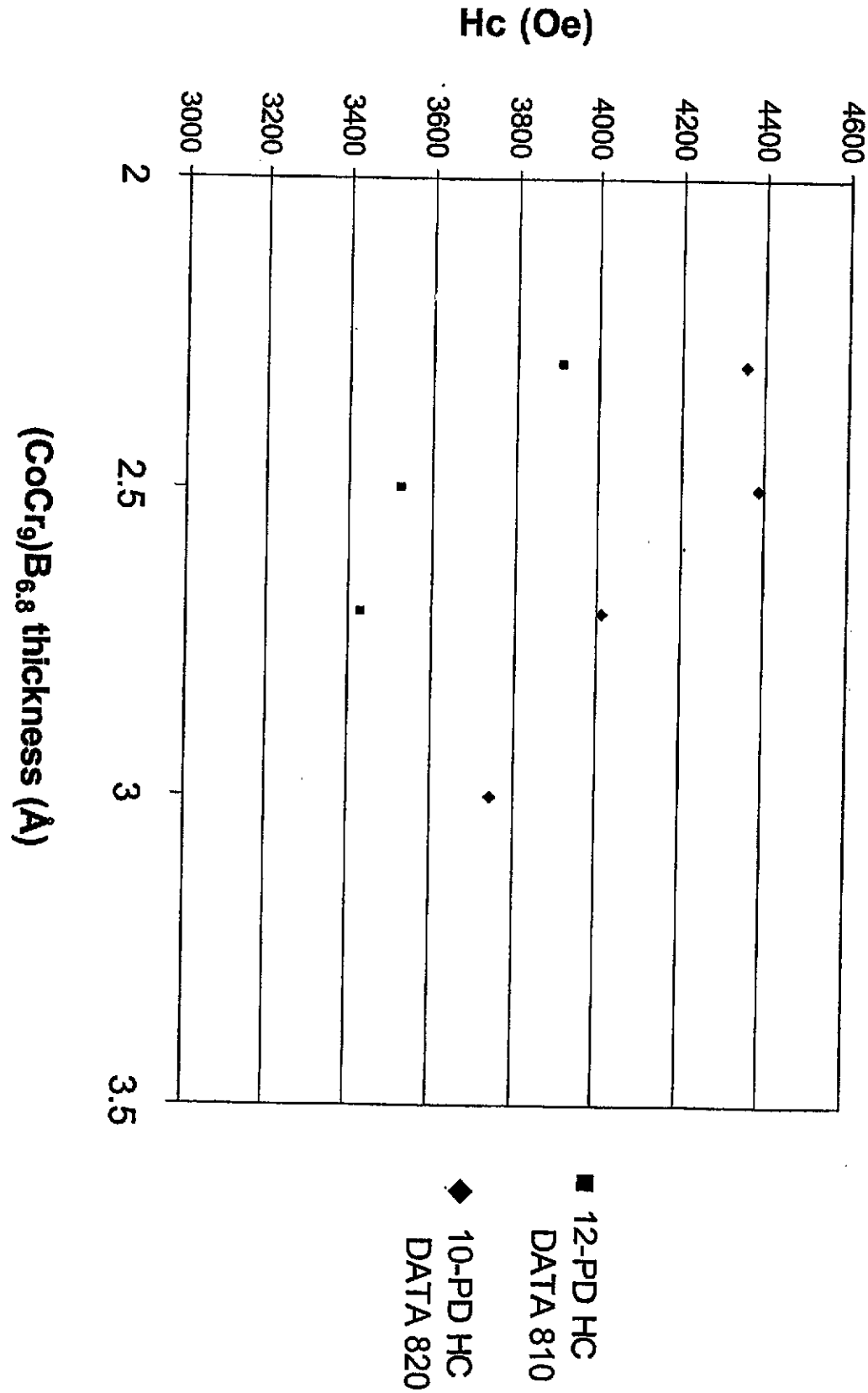
Hc (Oe)
4600
4400
4200
4000
3800
3600
3400
3200
3000
2
2.5
3
3.5
(CoCr9)B6.8 thickness (Å)
12-PD HC
DATA 810
10-PD HC
DATA 820

FIG. 8

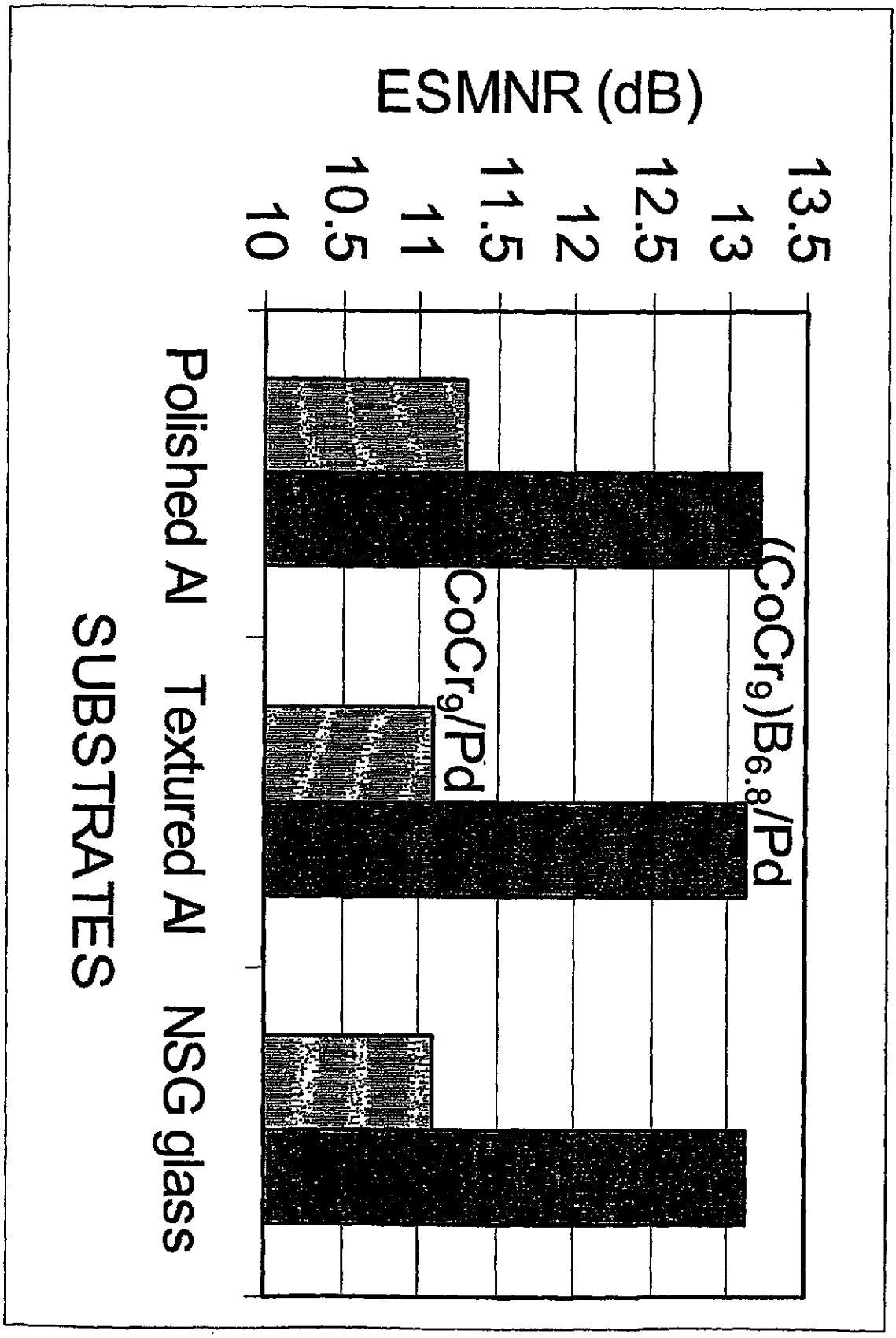
ESMNR (dB)
10
10.5
11
11.5
12
12.5
13
13.5
(CoCr9)B6.8/Pd
CoCr9/Pd
Polished Al
Textured Al
NSG glass
SUBSTRATES

FIG. 9