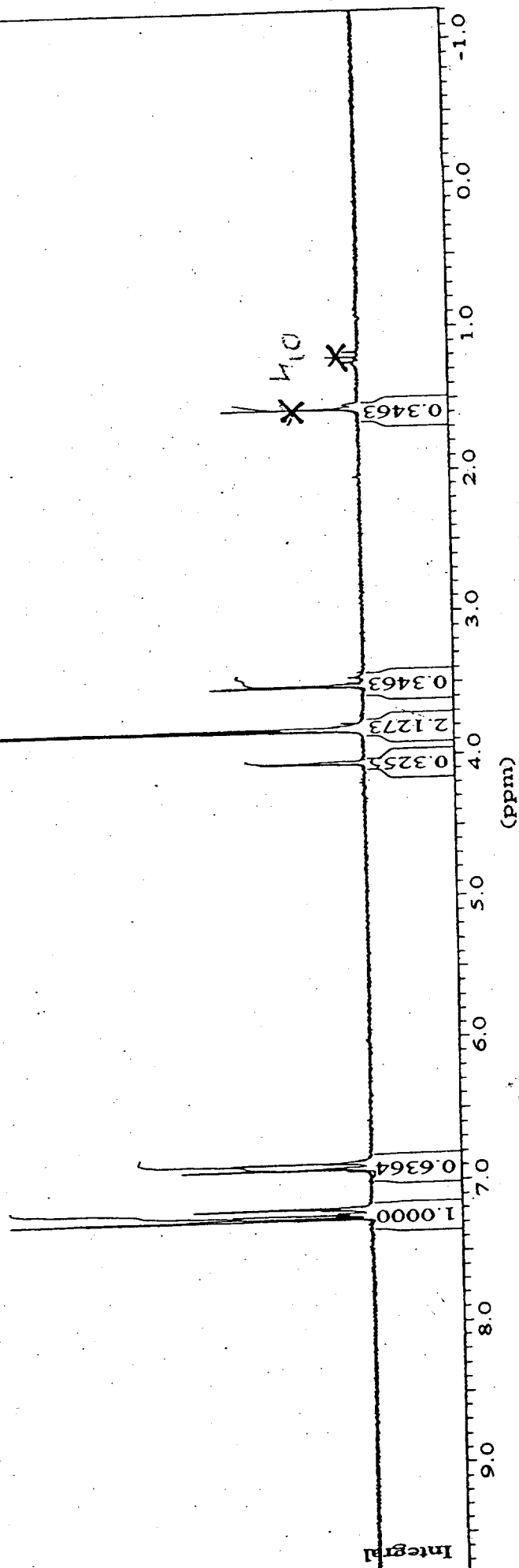
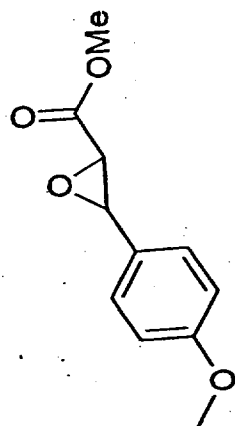


1

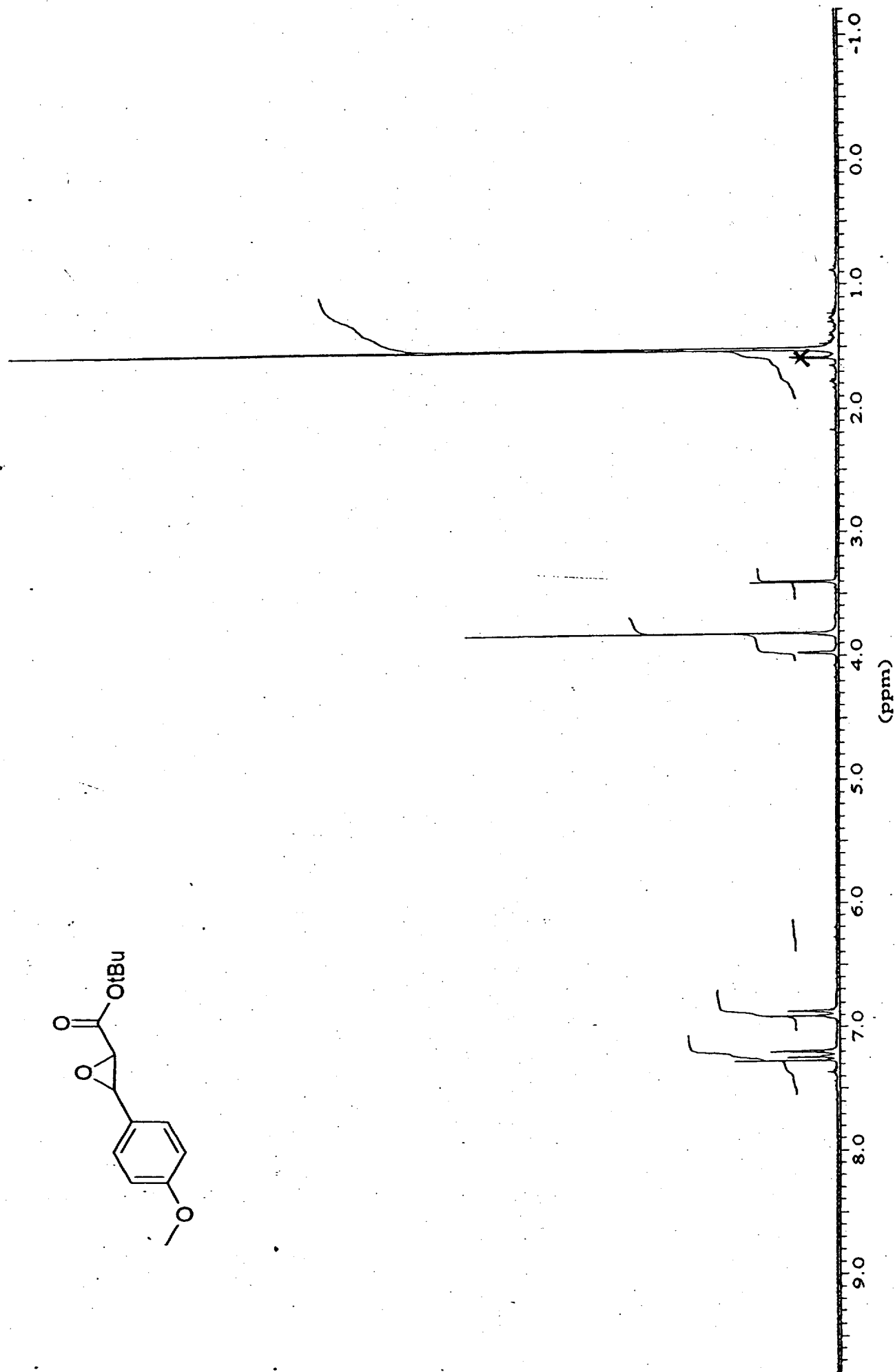
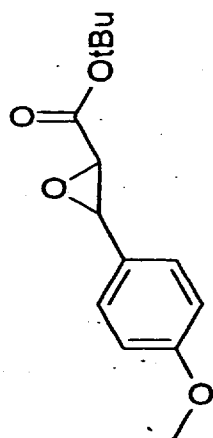
SI 02.0001721 REV. 2
10-16-00

¹H NMR 200 MHz (CDCl₃)

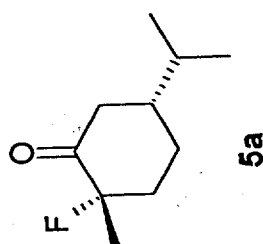


2

NMR 200 MHz (CDCl₃)



Σ

¹H NMR 400 MHz (C₆D₆)

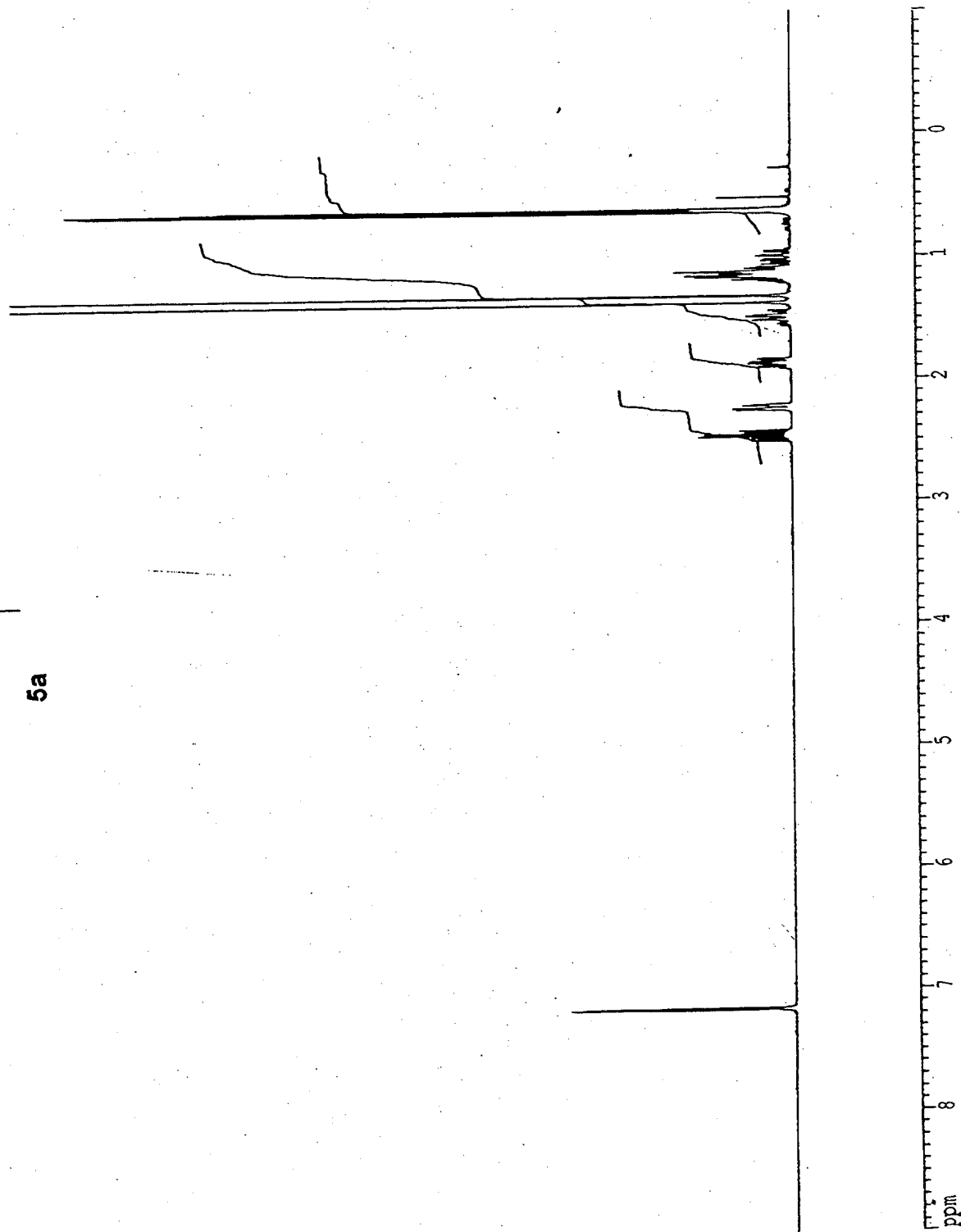
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Current Data Parameters
NAME      lb51a.101
EXPNO     1
PROCNO    1

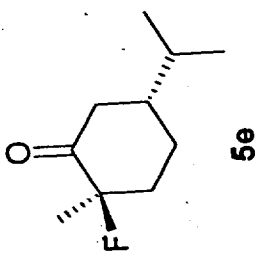
F2 - Acquisition Parameters
Date_     20000106
Time      10.30
INSTRUM   spect
PROBHD    5 mm QNP 1H/1
PULPROG   zg30
TD         32768
SOLVENT   C6D6
NS         16
DS         2
SWH        8223.685 Hz
FIDRES     0.250967 Hz
AQ         1.9923444 sec
RG         143.7
DW         60.800 usec
DE         10.00 usec
TE         300.0 K
D1         2.00000000 sec
P1         8.00 usec
SFO1      400.1324710 MHz
NUC1       1H
PL1        -3.00 dB

F2 - Processing parameters
SI         16384
SF         400.1300000 MHz
WDW        EM
SSB         0
LB         0.15 Hz
GB         0
PC         1.00

1D NMR plot parameters
CX         20.00 cm
FLP        9.000 ppm
F1         3601.17 Hz
F2P        -1.000 ppm
F2         -400.13 Hz
PPMCK      0.50000 ppm/cm
HZCM       200.06500 Hz/cm
  
```



¹H NMR 400 MHz (C₆D₆)

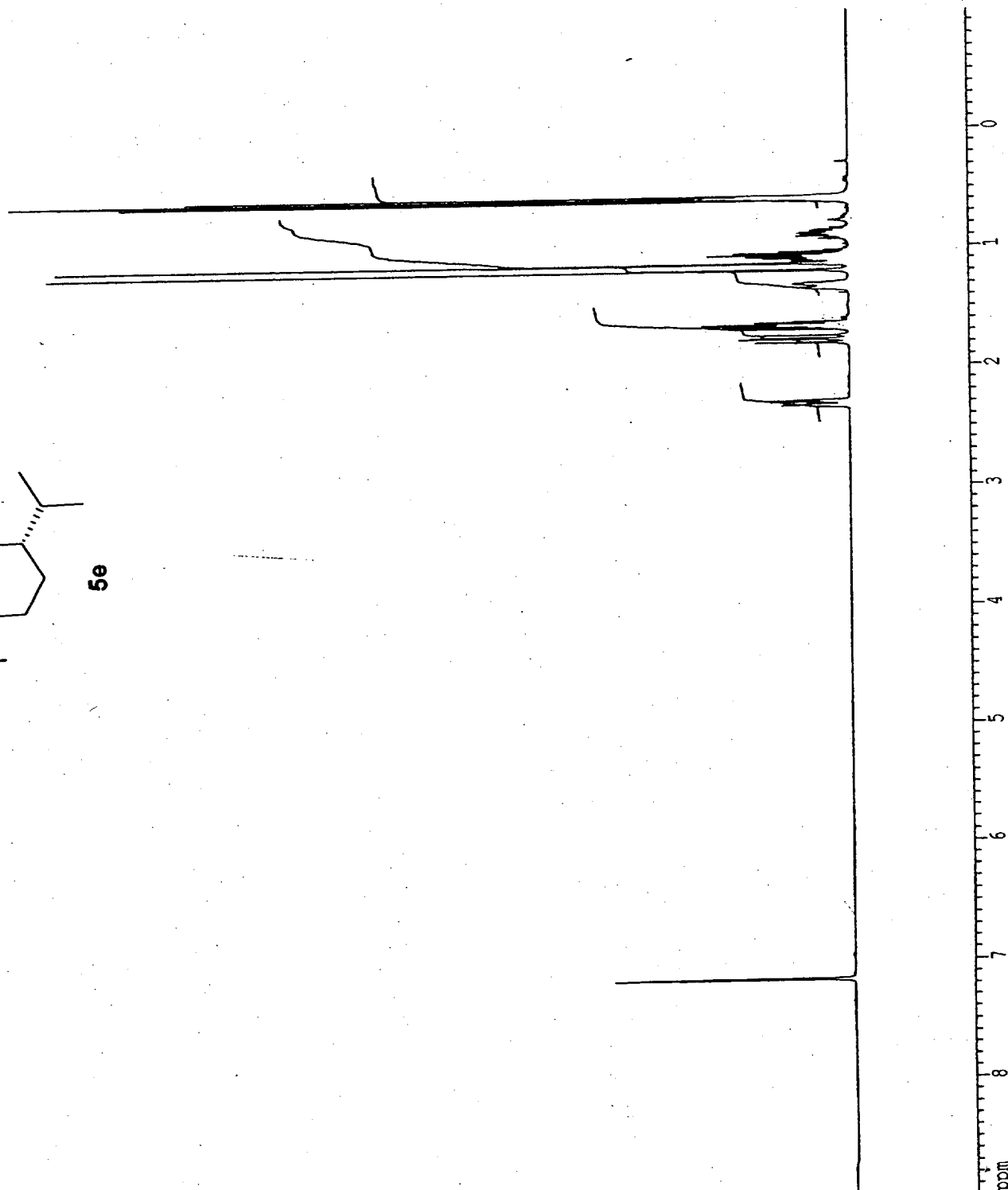


Current Data Parameters
NAME lb15db2.137
EXPNO 1
PROCNO 1

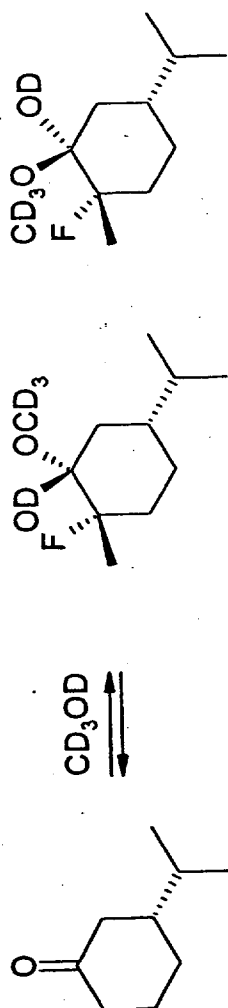
F2 - Acquisition Parameters
Date_ 990915
Time 13.49
INSTRUM spect
PROBHD 5 mm QNP 1H/1
PULPROG zg30
TD 32768
SOLVENT C6D6
NS 16
DS 2
SWH 8223.685 Hz
FIDRES 0.250967 Hz
AQ 1.9923444 sec
RG 90.5
DE 60.800 usec
TE 10.00 usec
300.0 K
D1 2.0000000 sec
P1 8.00 usec
SFO1 400.1324710 MHz
NUC1 1H
PL1 -3.00 dB

F2 - Processing parameters
SI 16384
SF 400.1300000 MHz
WDW EM
SSB 0
LB 0.15 Hz
GB 0
PC 1.40

1D NMR plot parameters
CX 20.00 cm
F1P 9.000 ppm
F1 3601.17 Hz
F2P -1.000 ppm
F2 -400.13 Hz
PPMCM 0.50000 ppm/cm
HZCM 200.06500 Hz/cm



5

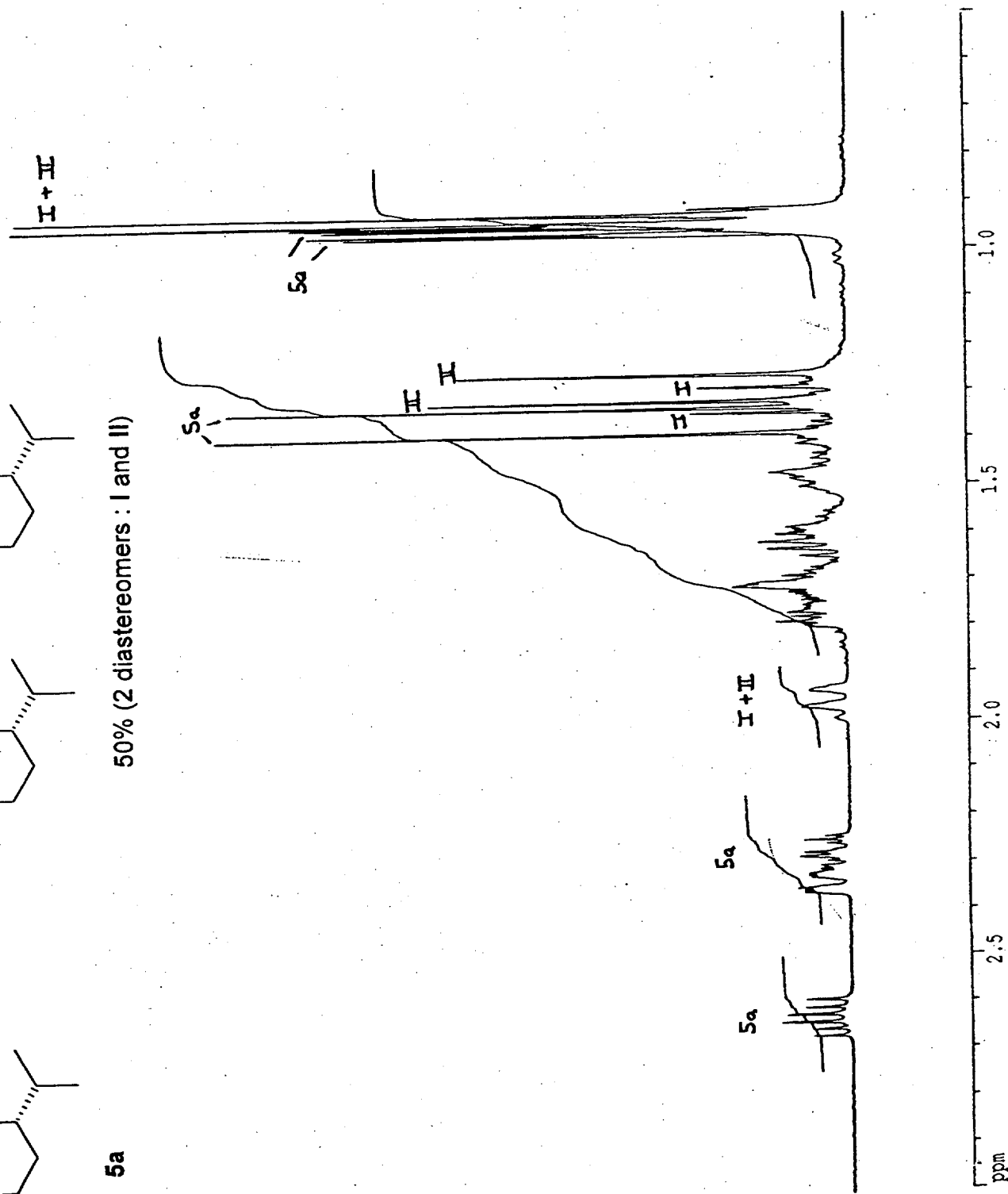
¹H NMR (400 MHz)

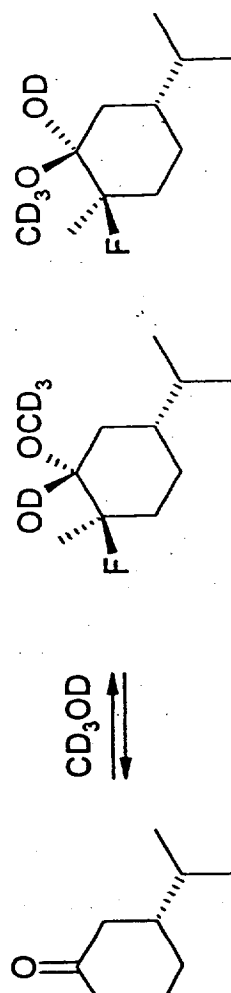
Current Data Parameters
 NAME lb102a.123
 EXPNO 4
 PROCNO 1

F2 - Acquisition Parameters
 Date_ 20000605
 Time 16.09
 INSTRUM spect
 PROBHD 5 mm QNP 1H/1
 PULPROG zg30
 TD 32768
 SOLVENT MeOH
 NS 16
 DS 2
 SWH 8223.685 Hz
 FIDRES 0.250967 Hz
 AQ 1.9923444 sec
 RG 256
 DW 60.800 usec
 DE 10.00 usec
 TE 300.0 K
 D1 2.00000000 sec
 P1 8.00 usec
 SFO1 400.1324710 MHz
 NUC1 1H
 PL1 -3.00 dB

F2 - Processing parameters
 SI 16384
 SF 400.1300000 MHz
 EM
 WDW 0
 SSB 0
 LB 0.30 Hz
 GB 0
 PC 1.00

1D NMR plot parameters
 CX 20.00 cm
 F1P 3.000 ppm
 F1 1200.39 Hz
 F2P 0.500 ppm
 F2 200.07 Hz
 PPMCH 0.12500 ppm/cm
 HZCM 50.01625 Hz/cm



¹H NMR (400 MHz)

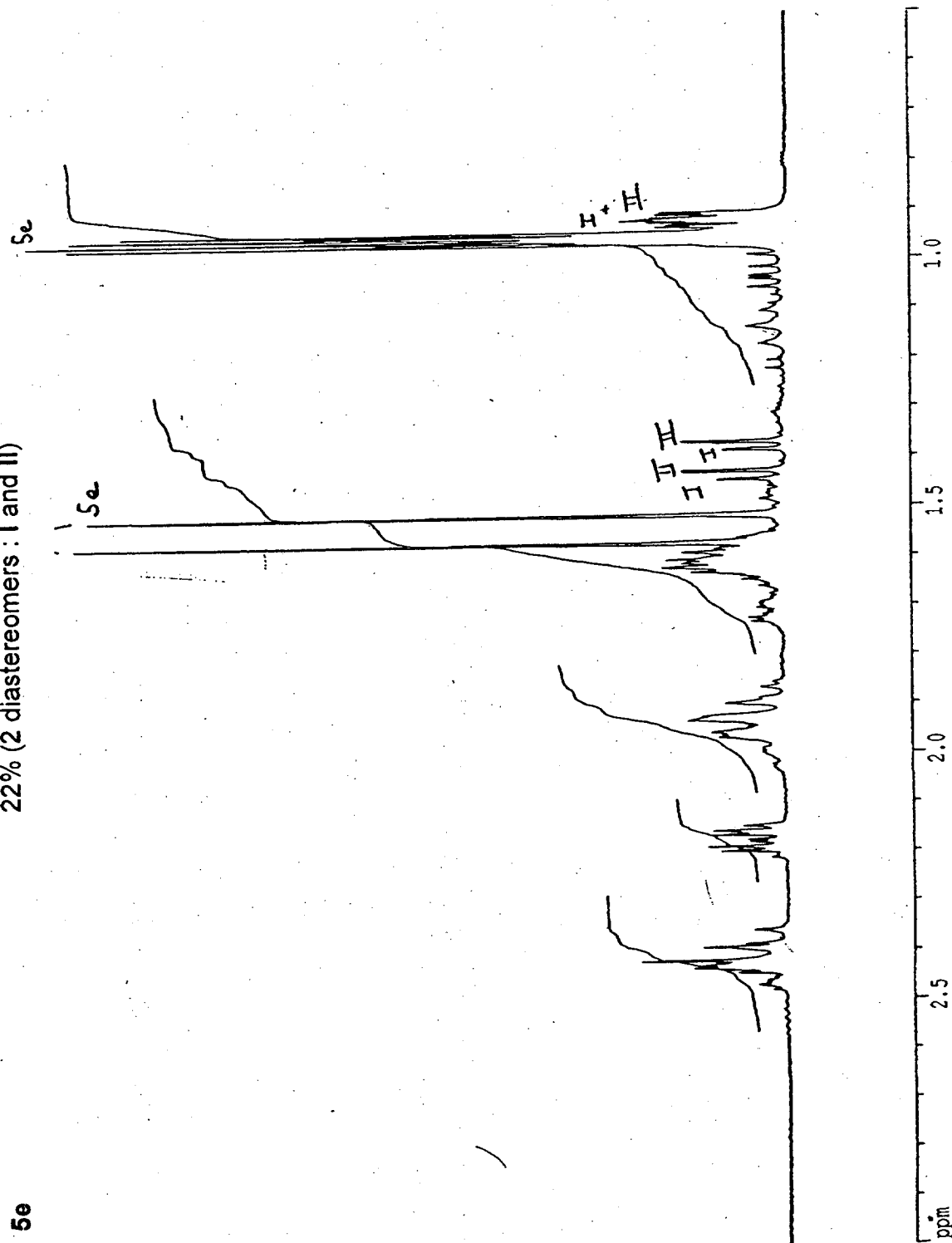
22% (2 diastereomers : I and II)

Current Data Parameters
 NAME lb102b.123
 EXPNO 4
 PROCNO 1

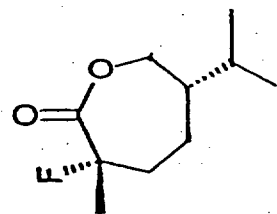
F2 - Acquisition Parameters
 Date_ 20000606
 Time 11.04
 INSTRUM spect
 PROBHD 5 mm QNP 1H/1
 PULPROG zg30
 TD 32768
 SOLVENT MeOH
 NS 8
 DS 0
 SWH 8223.685 Hz
 FIDRES 0.250967 Hz
 AQ 1.9923444 sec
 RG 256
 DW 60.800 usec
 DE 10.00 usec
 TE 300.0 K
 D1 2.0000000 sec
 F1 8.00 usec
 SFO1 400.1324710 MHz
 NUC1 1H
 PL1 -3.00 dB

F2 - Processing parameters
 SI 16384
 SF 400.1300000 MHz
 WDW EM
 SSB 0
 LB 0.20 Hz
 GB 0
 PC 1.00

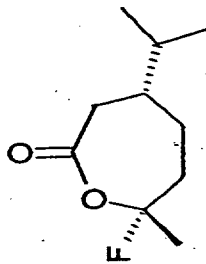
1D NMR plot parameters
 CX 20.00 cm
 FLP 3.000 ppm
 F1 1200.39 Hz
 F2 0.500 ppm
 F2 200.07 Hz
 PPMCM 0.12500 ppm/cm
 HZCM 50.01625 Hz/cm



t

MR 400 MHz (C₆D₆)

Isomer I



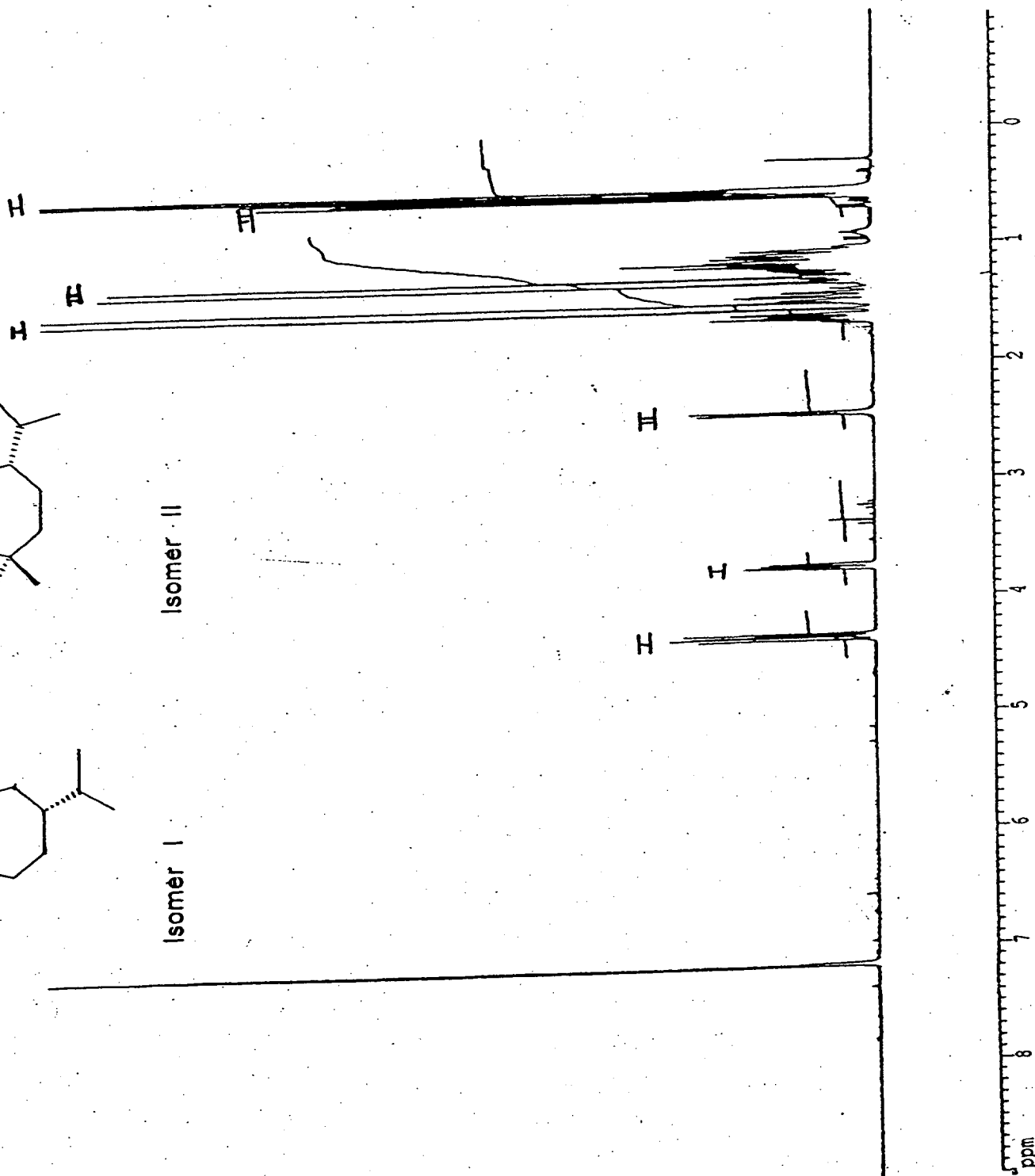
Isomer II

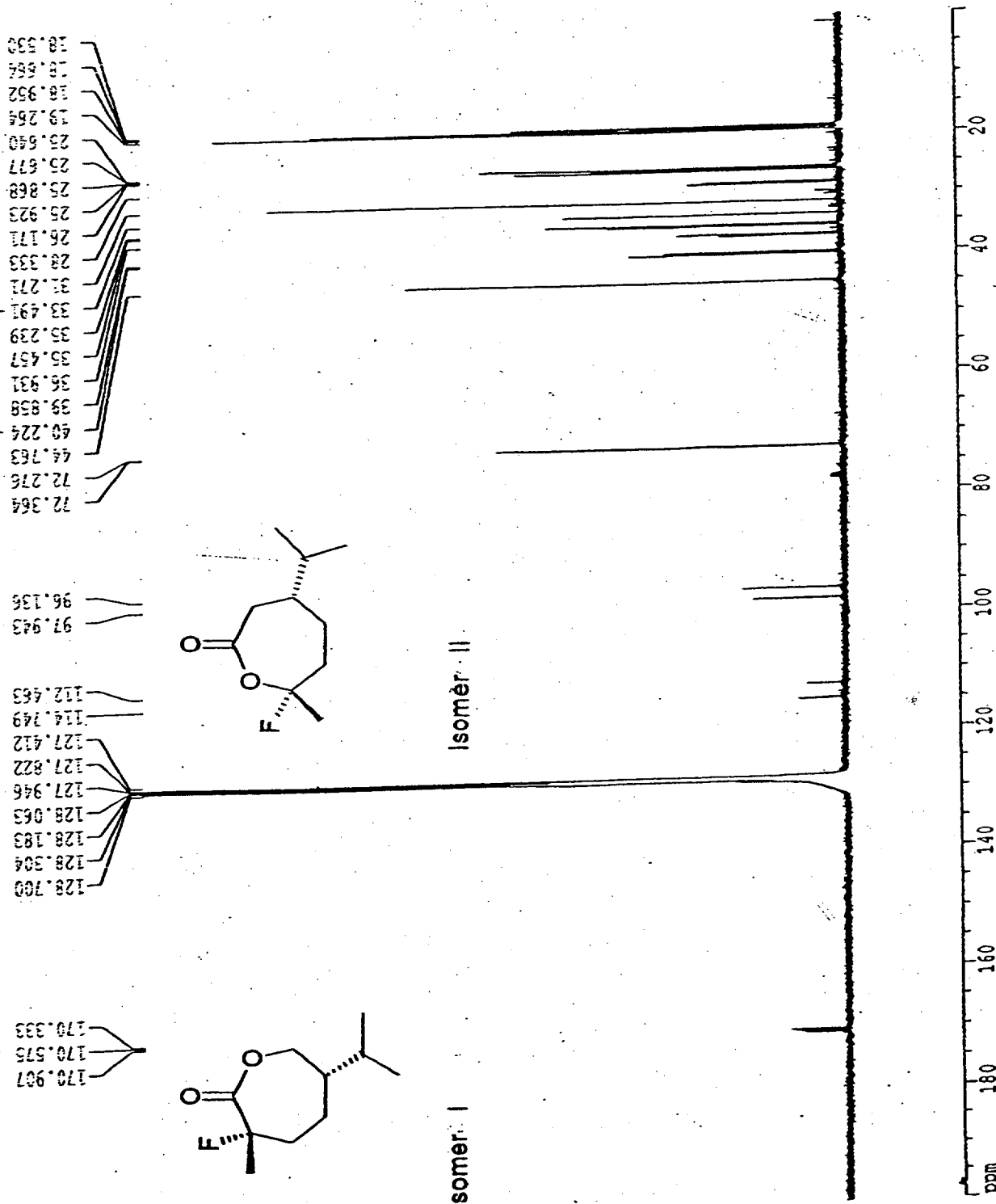
Current Data Parameters
 NAME lbh1.139
 EXPNO 1
 PROCNO 1

F2 - Acquisition Parameters
 Date_ 991001
 Time 14.29
 INSTRUM spect
 PROBHD 5 mm QNP 1H/1
 PULPROG zg30
 TD 32768
 SOLVENT CDCl₃
 NS 16
 DS 2
 SWH 8221.685 Hz
 FIDRES 0.250967 Hz
 AQ 1.9923444 sec
 RG 161.3
 DW 60.800 usec
 DE 10.00 usec
 TE 300.0 K
 D1 2.00000000 sec
 P1 8.00 usec
 SFO1 400.1324710 MHz
 NUC1 1H
 PL1 -3.00 dB

F2 - Processing Parameters
 SI 16384
 SF 400.1300000 MHz
 WDW EM
 SSB 0
 LB 0.15 Hz
 GB 0
 PC 1.00

1D NMR plot parameters
 CX 20.00 cm
 FIP 9.000 ppm
 F1 3601.17 Hz
 F2P -1.000 ppm
 F2 -400.13 Hz
 F2MCH 0.50000 ppm/cm
 HZCM 200.06500 Hz/cm



NMR 400 MHz (C₆D₆)

Current Data Parameters
 NAME lbel13.139
 EXPNO 2
 PROCNO 1

F2 - Acquisition Parameters
 Date_ 91001
 Time 15.59
 INSTRUM spect
 PROBHD 5 mm QNP 1H/1
 PULPROG zgpg30
 TD 65536
 SOLVENT C6D6
 NS 13360
 DS 2
 SWH 31847.133 Hz
 FIDRES 0.485949 Hz
 AQ 1.0289652 sec
 RG 4096
 DW 15.700 usec
 DE 10.00 usec
 TE 300.0 K
 DI2 0.00002000 sec
 PL13 18.00 dB
 DI 2.00000000 sec
 CPDPRG2 waltz16
 PCPD2 80.00 usec
 SFO2 400.1316005 MHz
 NUC2 1H
 PL2 -3.00 dB
 PL12 18.00 dB
 P1 7.00 usec
 SFO1 100.6234358 MHz
 NUC1 13C
 PL1 -6.00 dB
 DI1 0.03000000 sec

F2 - Processing parameters
 SI 32768
 SF 100.6127290 MHz
 WDW EM
 SSB 0
 LB 1.00 Hz
 GB 0
 PC 1.40

1D NMR plot parameters
 CX 20.00 cm
 FLP 200.000 ppm
 F1 20122.55 Hz
 F2 0.000 ppm
 PPMCM 10.00000 ppm/cm
 HZCM 1006.12732 Hz/cm

HPLC CHROMATOGRAPHY

