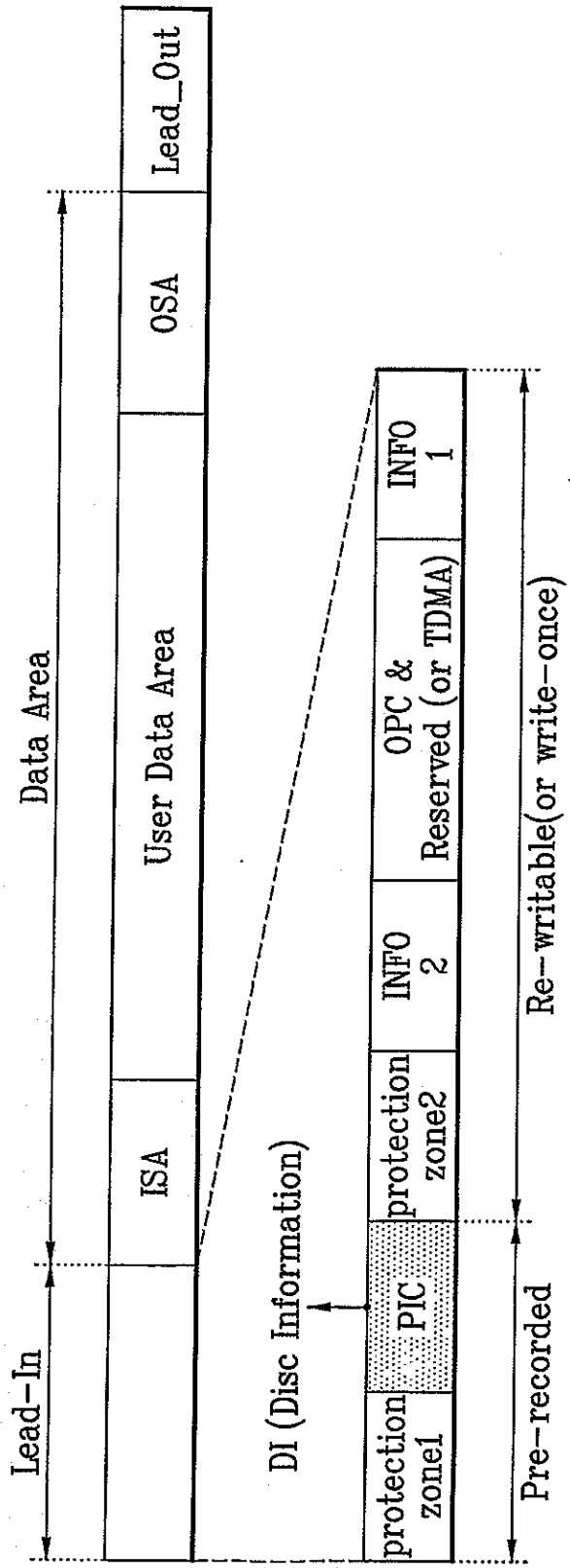
FIG. 1



- ISA : Inner Spare Area
- OSA : Outer Spare Area
- PIC : Permanent Information & Control data
- TDMA : Temporary Defect Management Area

FIG. 2

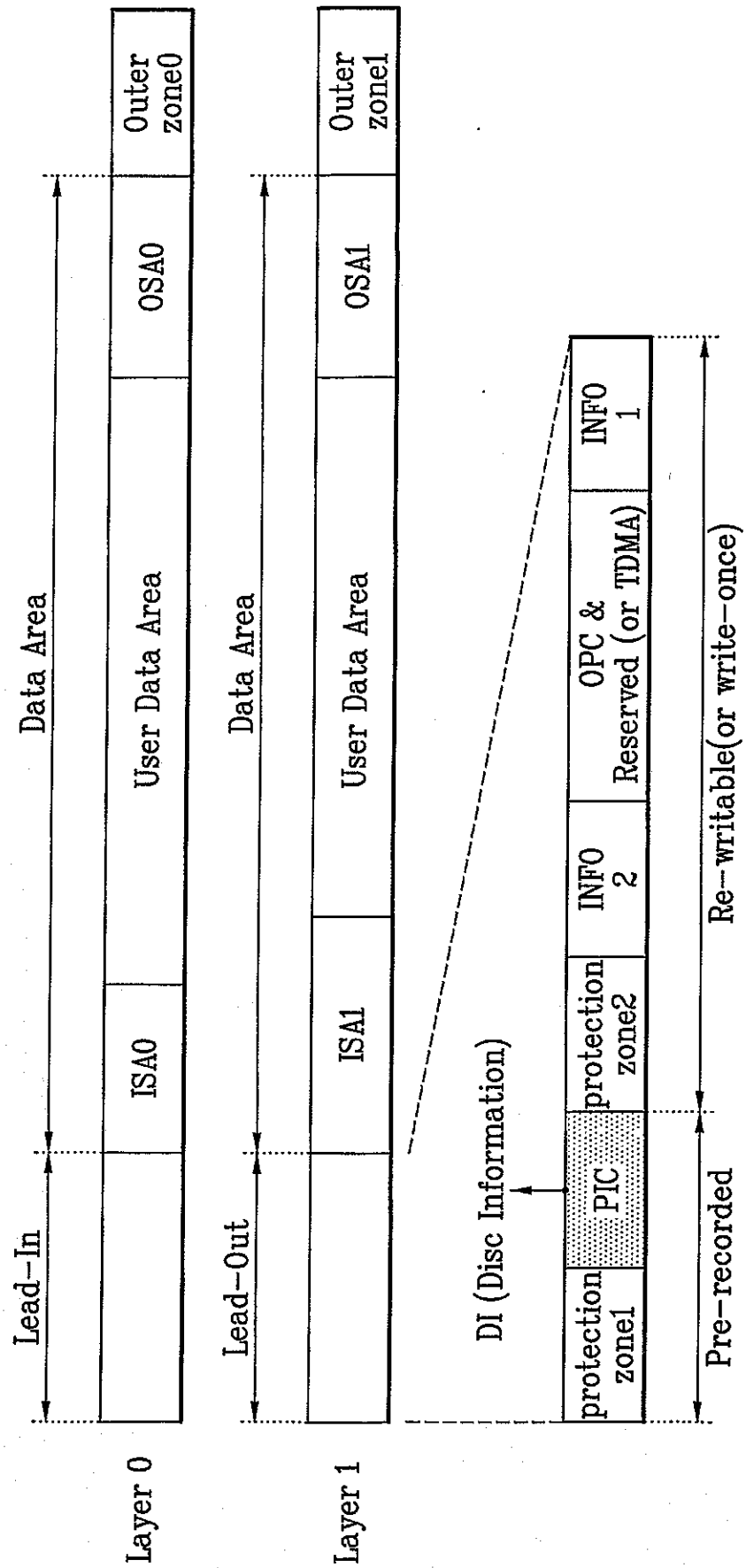

Layer 0
Layer 1
Lead-In
Data Area
ISA0
User Data Area
OSA0
Outer zone0
Lead-Out
Data Area
ISA1
User Data Area
OSA1
Outer zone1
DI (Disc Information)
protection zone1
PIC
protection zone2
INFO 2
OPC & Reserved (or TDMA)
INFO 1
Pre-recorded
Re-writable(or write-once)

FIG. 3

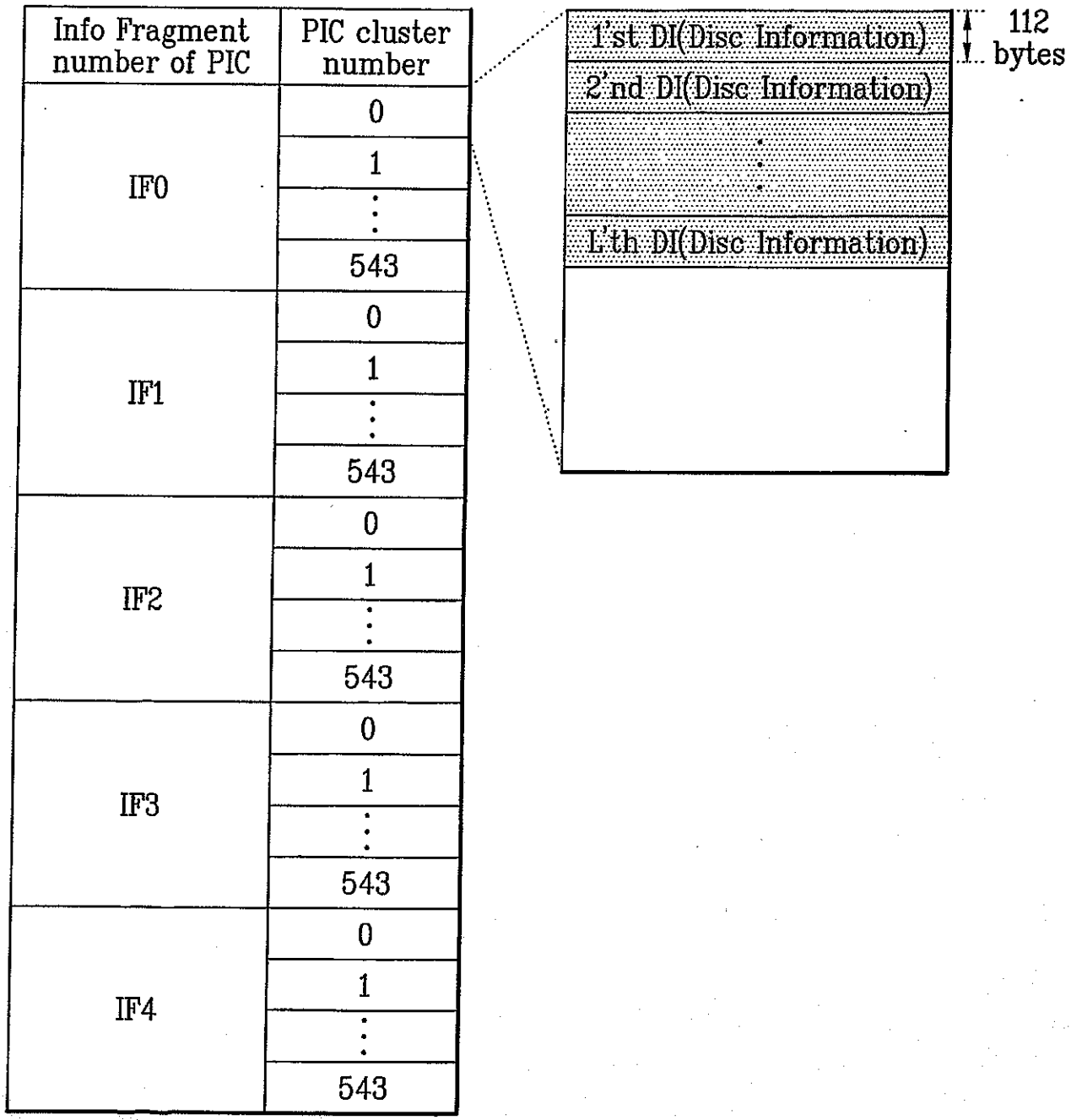

Info Fragment number of PIC
PIC cluster number
IF0
IF1
IF2
IF3
IF4
0
1
543
1'st DI(Disc Information)
2'nd DI(Disc Information)
L'th DI(Disc Information)
112 bytes

FIG. 4A

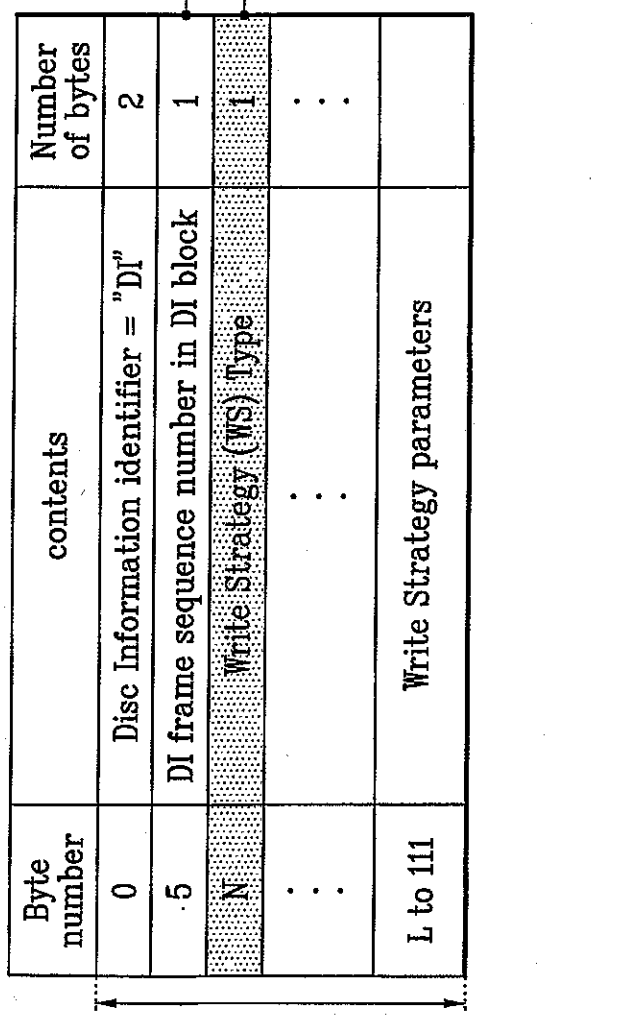

Disc Information (112 bytes)
Byte number
contents
Number of bytes
0
Disc Information identifier = "DI"
2
5
DI frame sequence number in DI block
1
N
Write Strategy (WS) Type
1
L to 111
Write Strategy parameters
00h : 1X, Layer0 DI
01h : 1X, Layer1 DI
02h : 2X, Layer0 DI
03h : 2X, Layer1 DI
0000 0000b : do not exist write strategy
0000 0001b : Write Strategy 1(ex. (N-1)WS)
0000 0010b : Write Strategy 2(ex. n/2WS)
XXXX XXXXb : Write Strategy N

FIG. 4B

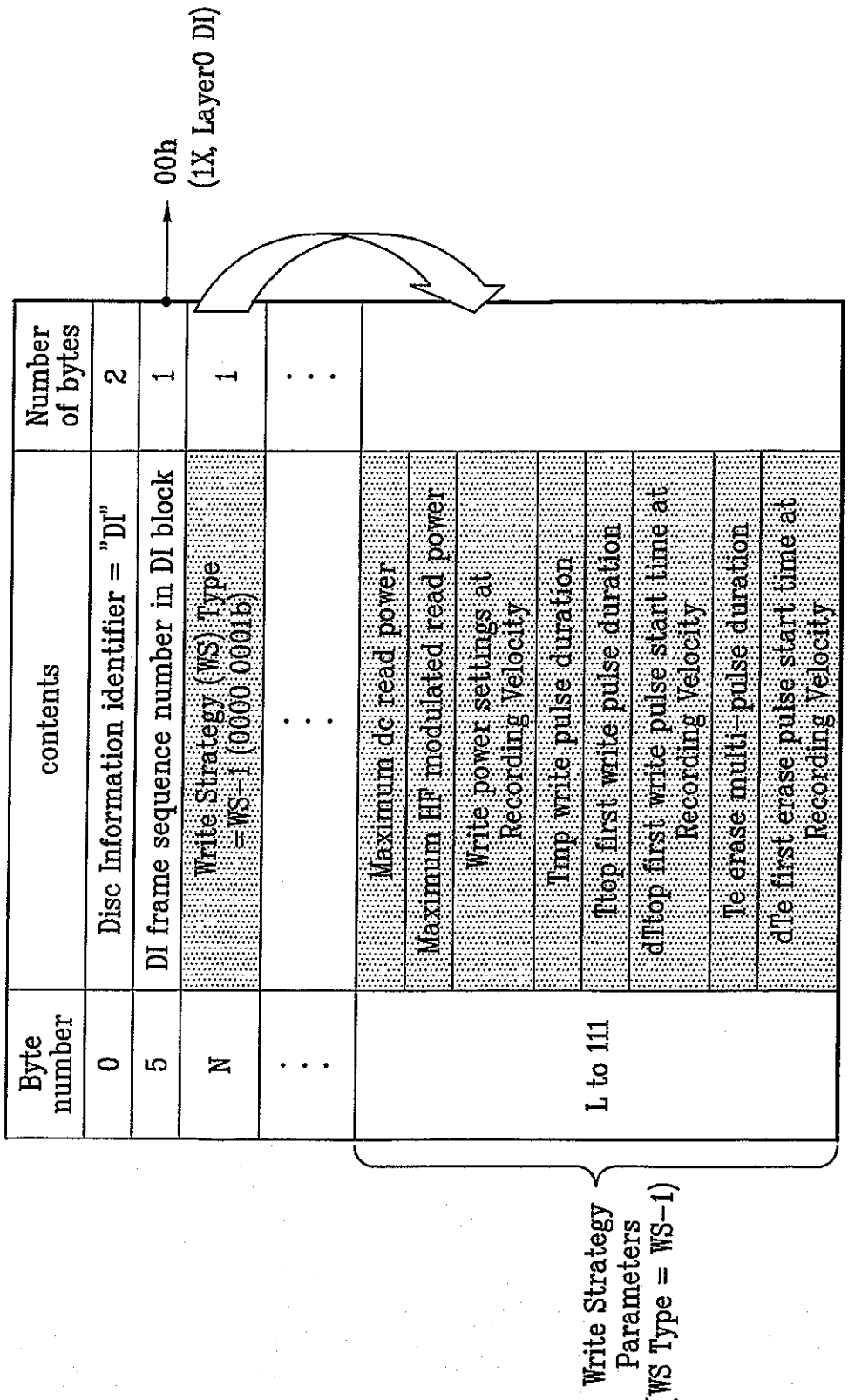

00h
(1X, Layer0 DI)
Byte number
contents
Number of bytes
0
Disc Information identifier = "DI"
2
5
DI frame sequence number in DI block
1
N
Write Strategy (WS) Type
= WS-1 (0000 0001b)
1
L to 111
Maximum dc read power
Maximum HF modulated read power
Write power settings at Recording Velocity
Tmp write pulse duration
Ttop first write pulse duration
dTtop first write pulse start time at Recording Velocity
Te erase multi-pulse duration
dTe first erase pulse start time at Recording Velocity
Write Strategy Parameters (WS Type = WS-1)

FIG. 4C

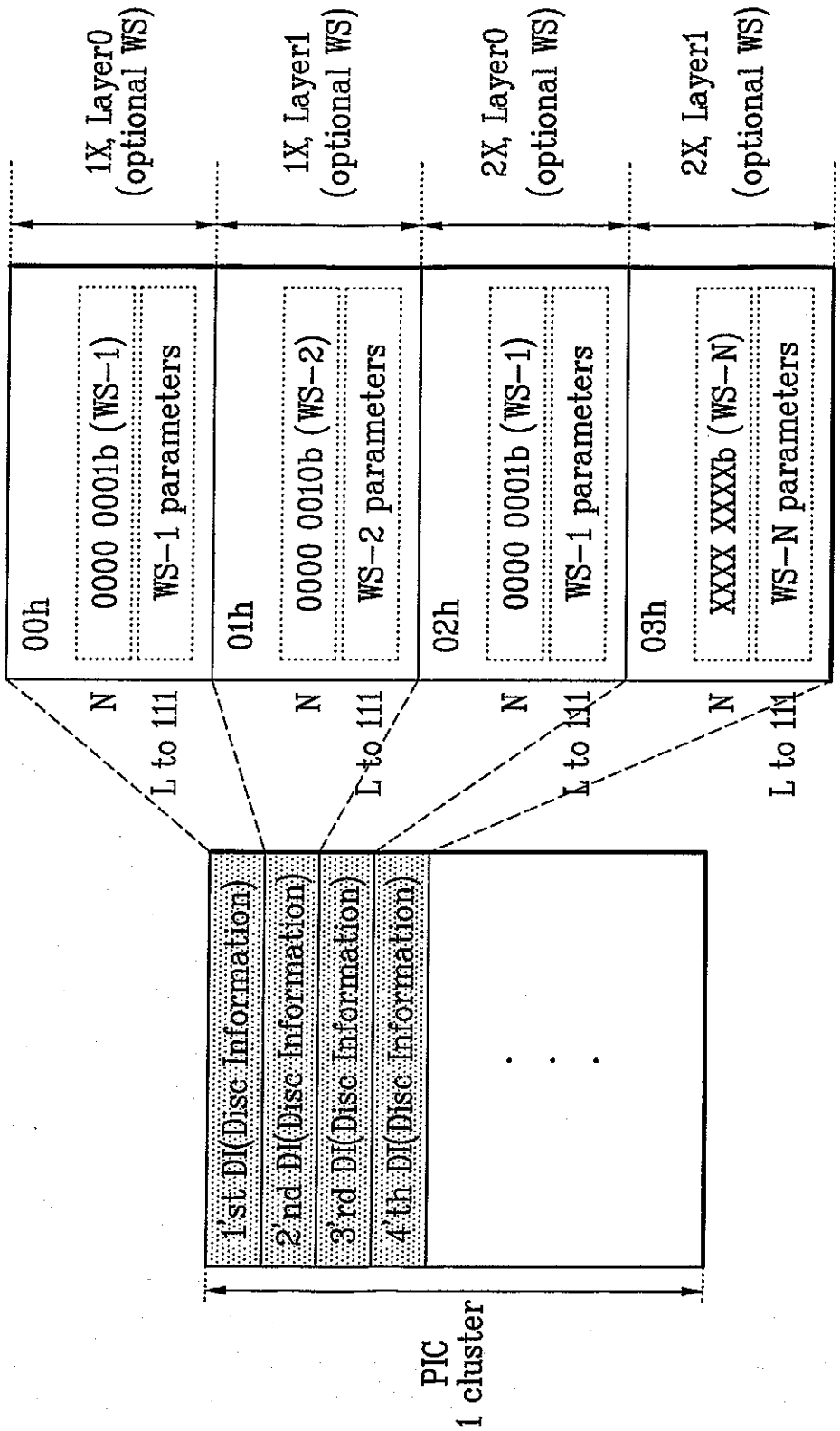

1X, Layer0 (optional WS)
1X, Layer1 (optional WS)
2X, Layer0 (optional WS)
2X, Layer1 (optional WS)
00h
0000 0001b (WS-1)
WS-1 parameters
01h
0000 0010b (WS-2)
WS-2 parameters
02h
0000 0001b (WS-1)
WS-1 parameters
03h
XXXX XXXXb (WS-N)
WS-N parameters
N
L to 111
1'st DI(Disc Information)
2'nd DI(Disc Information)
3'rd DI(Disc Information)
4'th DI(Disc Information)
PIC
1 cluster

FIG. 4D

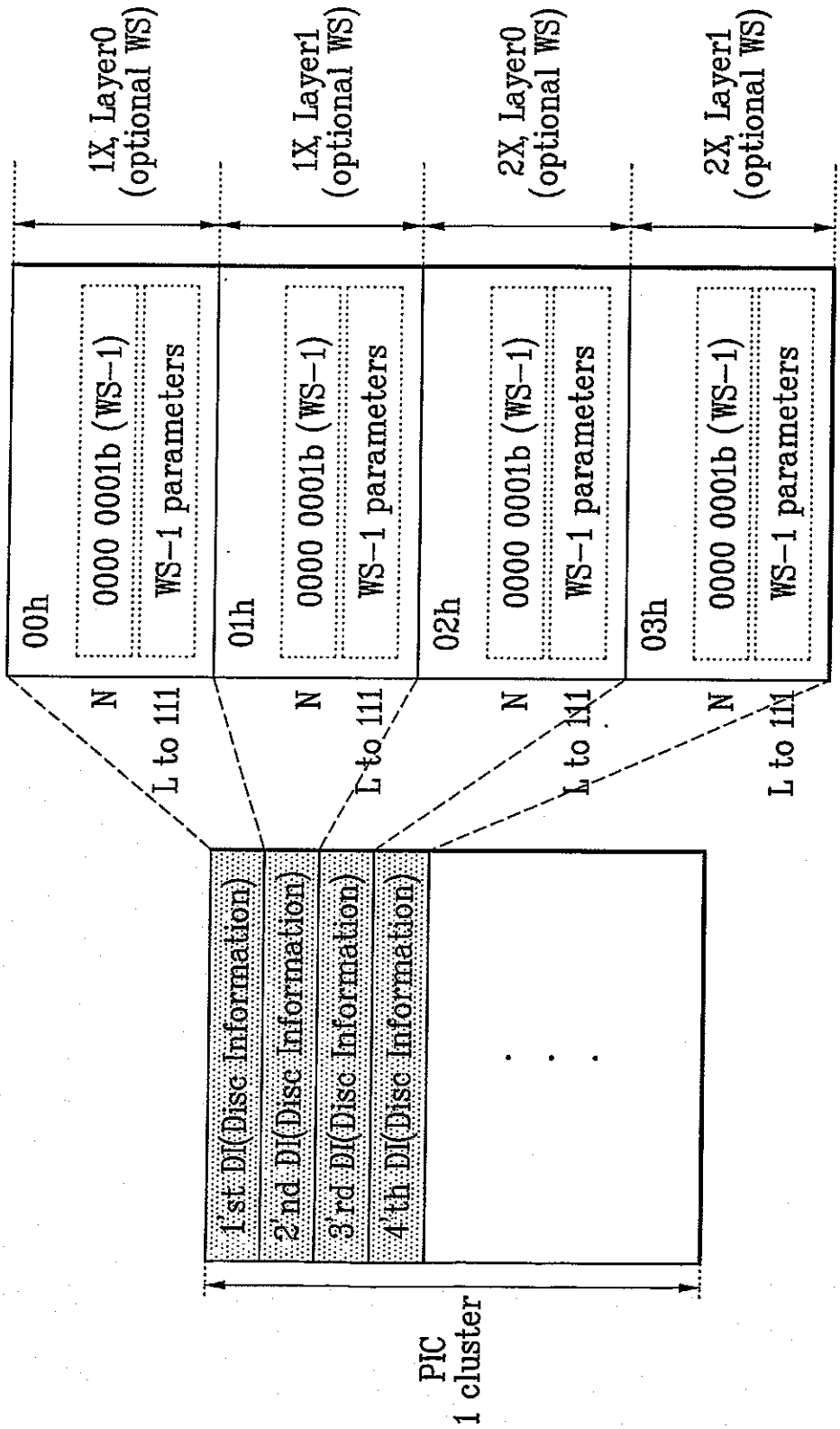

1X, Layer0 (optional WS)
1X, Layer1 (optional WS)
2X, Layer0 (optional WS)
2X, Layer1 (optional WS)
00h
01h
02h
03h
0000 0001b (WS-1)
WS-1 parameters
N
L to 111
1'st DI(Disc Information)
2'nd DI(Disc Information)
3'rd DI(Disc Information)
4'th DI(Disc Information)
PIC
1 cluster

FIG. 4E

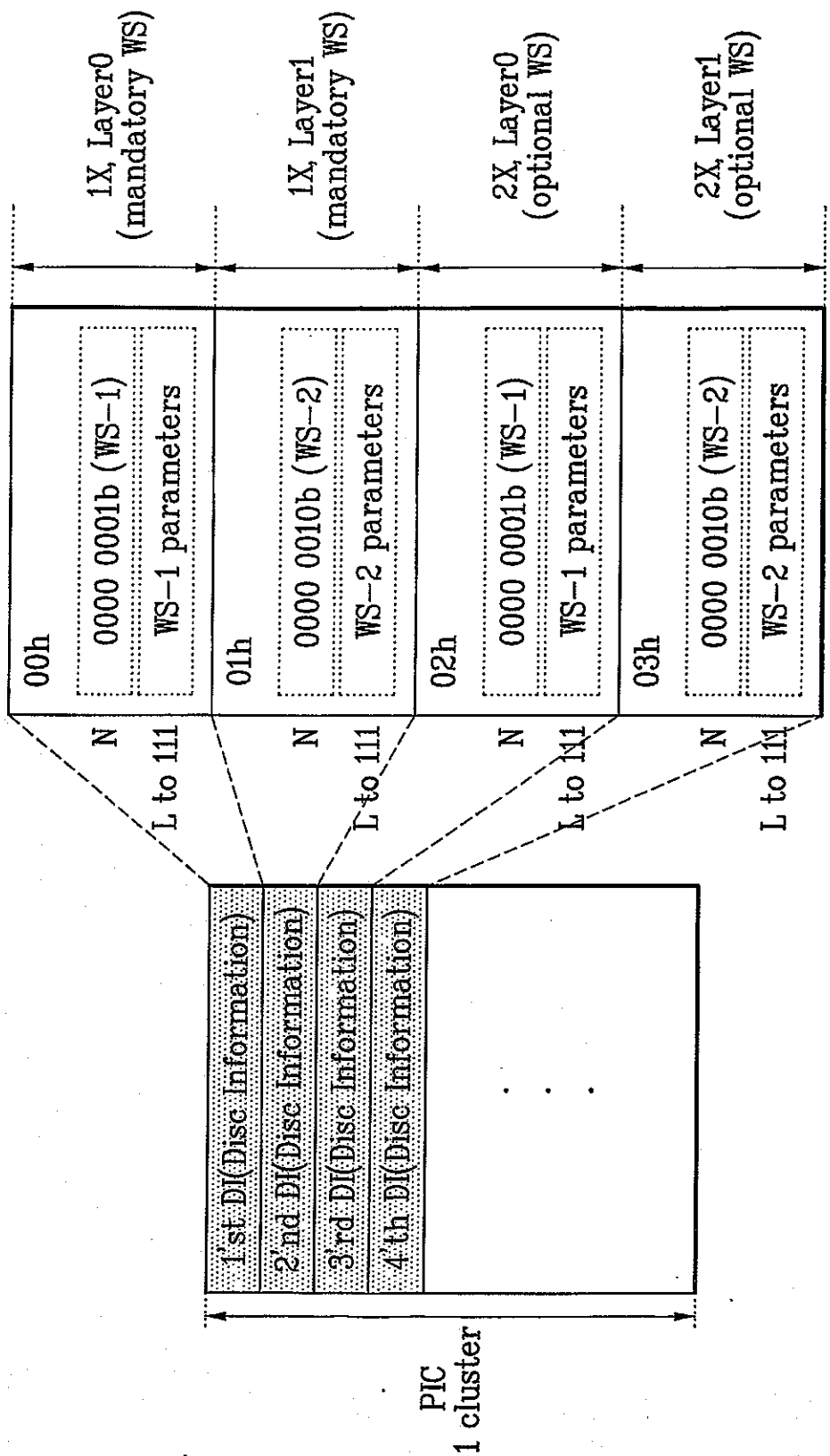

1X, Layer0 (mandatory WS)
1X, Layer1 (mandatory WS)
2X, Layer0 (optional WS)
2X, Layer1 (optional WS)
00h
0000 0001b (WS-1)
WS-1 parameters
01h
0000 0010b (WS-2)
WS-2 parameters
02h
0000 0001b (WS-1)
WS-1 parameters
03h
0000 0010b (WS-2)
WS-2 parameters
N
L to 111
1'st DI(Disc Information)
2'nd DI(Disc Information)
3'rd DI(Disc Information)
4'th DI(Disc Information)
PIC
1 cluster

FIG. 5A

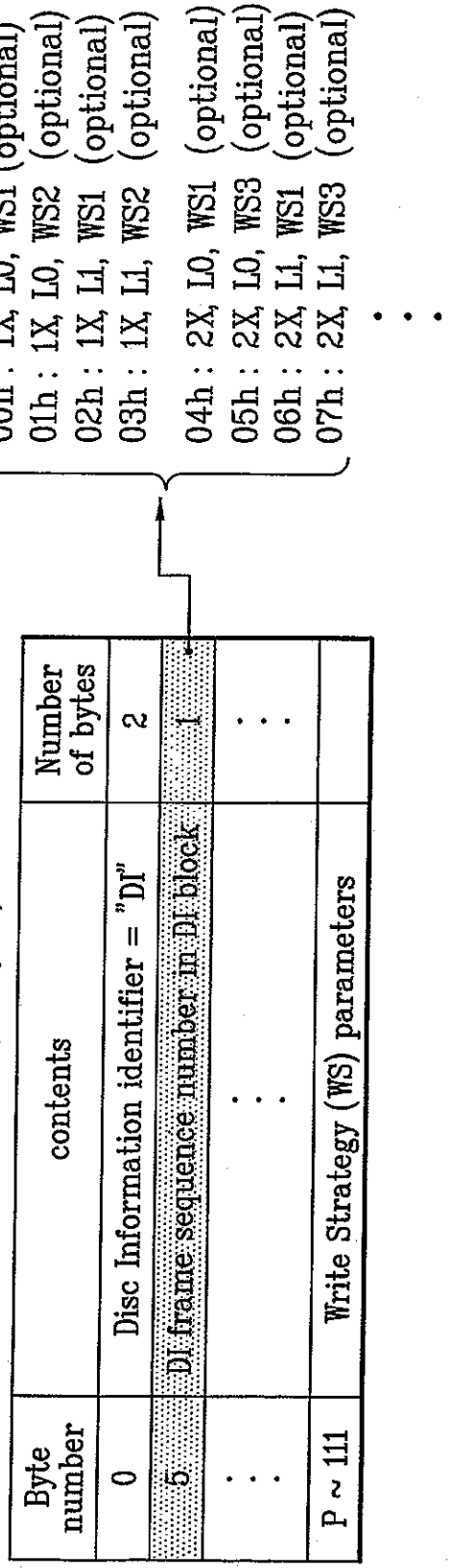

Disc Information (112 bytes)
Byte number
contents
Number of bytes
0
Disc Information identifier = "DI"
2
5
DI frame sequence number in DI block
1
P ~ 111
Write Strategy (WS) parameters
00h : 1X, L0, WS1 (optional)
01h : 1X, L0, WS2 (optional)
02h : 1X, L1, WS1 (optional)
03h : 1X, L1, WS2 (optional)
04h : 2X, L0, WS1 (optional)
05h : 2X, L0, WS3 (optional)
06h : 2X, L1, WS1 (optional)
07h : 2X, L1, WS3 (optional)

FIG. 5B

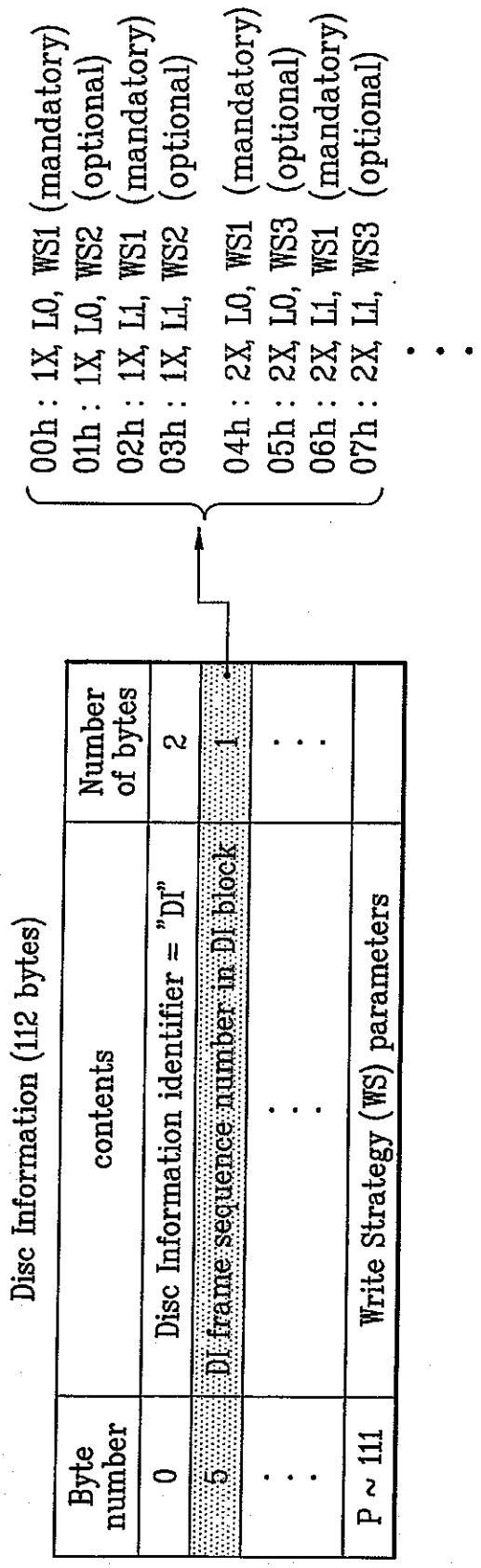

Disc Information (112 bytes)
Byte number
contents
Number of bytes
0
Disc Information identifier = "DI"
2
5
DI frame sequence number in DI block
1
P ~ 111
Write Strategy (WS) parameters
00h : 1X, L0, WS1 (mandatory)
01h : 1X, L0, WS2 (optional)
02h : 1X, L1, WS1 (mandatory)
03h : 1X, L1, WS2 (optional)
04h : 2X, L0, WS1 (mandatory)
05h : 2X, L0, WS3 (optional)
06h : 2X, L1, WS1 (mandatory)
07h : 2X, L1, WS3 (optional)

FIG. 6A

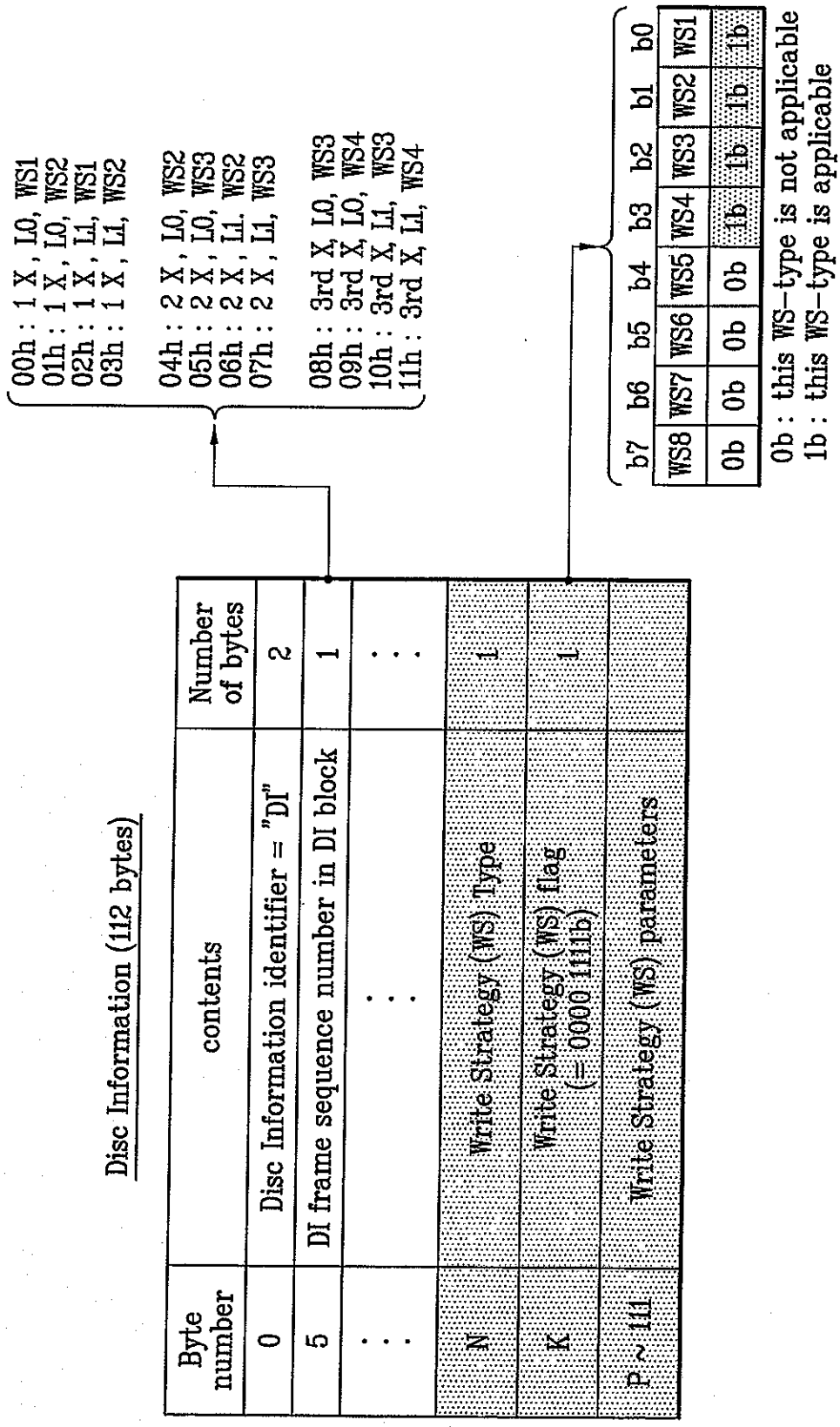

Disc Information (112 bytes)
Byte number
contents
Number of bytes
0
Disc Information identifier = "DI"
2
5
DI frame sequence number in DI block
1
N
Write Strategy (WS) Type
1
K
Write Strategy (WS) flag (= 0000 1111b)
1
P ~ 111
Write Strategy (WS) parameters
00h : 1 X , L0, WS1
01h : 1 X , L0, WS2
02h : 1 X , L1, WS1
03h : 1 X , L1, WS2
04h : 2 X , L0, WS2
05h : 2 X , L0, WS3
06h : 2 X , L1, WS2
07h : 2 X , L1, WS3
08h : 3rd X, L0, WS3
09h : 3rd X, L0, WS4
10h : 3rd X, L1, WS3
11h : 3rd X, L1, WS4
b7 b6 b5 b4 b3 b2 b1 b0
WS8 WS7 WS6 WS5 WS4 WS3 WS2 WS1
0b 0b 0b 0b 1b 1b 1b 1b
0b : this WS-type is not applicable
1b : this WS-type is applicable

FIG. 6B

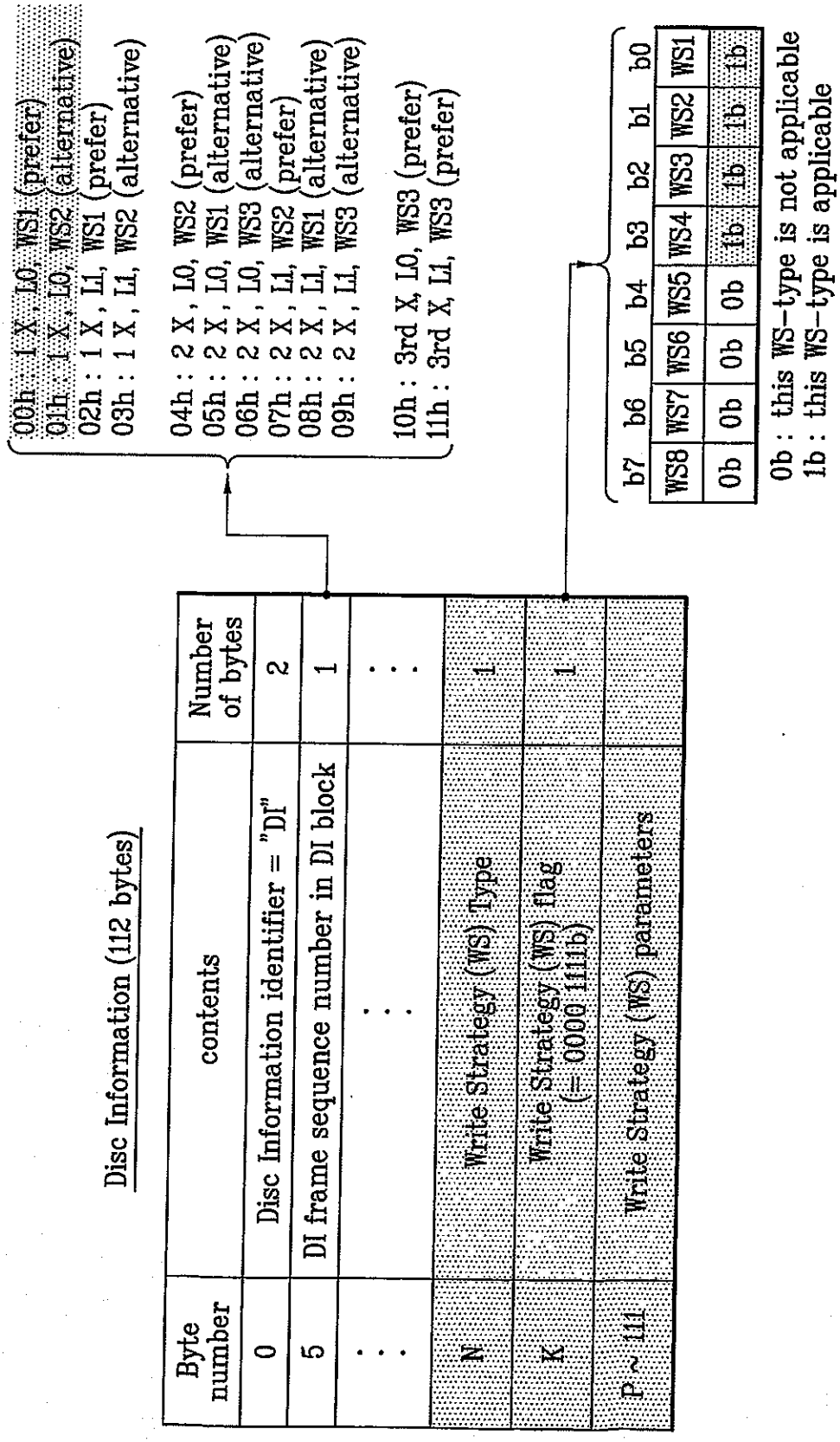

Disc Information (112 bytes)
Byte number
contents
Number of bytes
0
Disc Information identifier = "DI"
2
5
DI frame sequence number in DI block
1
N
Write Strategy (WS) Type
1
K
Write Strategy (WS) flag (= 0000 1111b)
1
P ~ 111
Write Strategy (WS) parameters
00h : 1 X , L0, WS1 (prefer)
01h : 1 X , L0, WS2 (alternative)
02h : 1 X , L1, WS1 (prefer)
03h : 1 X , L1, WS2 (alternative)
04h : 2 X , L0, WS2 (prefer)
05h : 2 X , L0, WS1 (alternative)
06h : 2 X , L0, WS3 (alternative)
07h : 2 X , L1, WS2 (prefer)
08h : 2 X , L1, WS1 (alternative)
09h : 2 X , L1, WS3 (alternative)
10h : 3rd X, L0, WS3 (prefer)
11h : 3rd X, L1, WS3 (prefer)
b7 b6 b5 b4 b3 b2 b1 b0
WS8 WS7 WS6 WS5 WS4 WS3 WS2 WS1
0b 0b 0b 0b 1b 1b 1b 1b
0b : this WS-type is not applicable
1b : this WS-type is applicable

FIG. 7

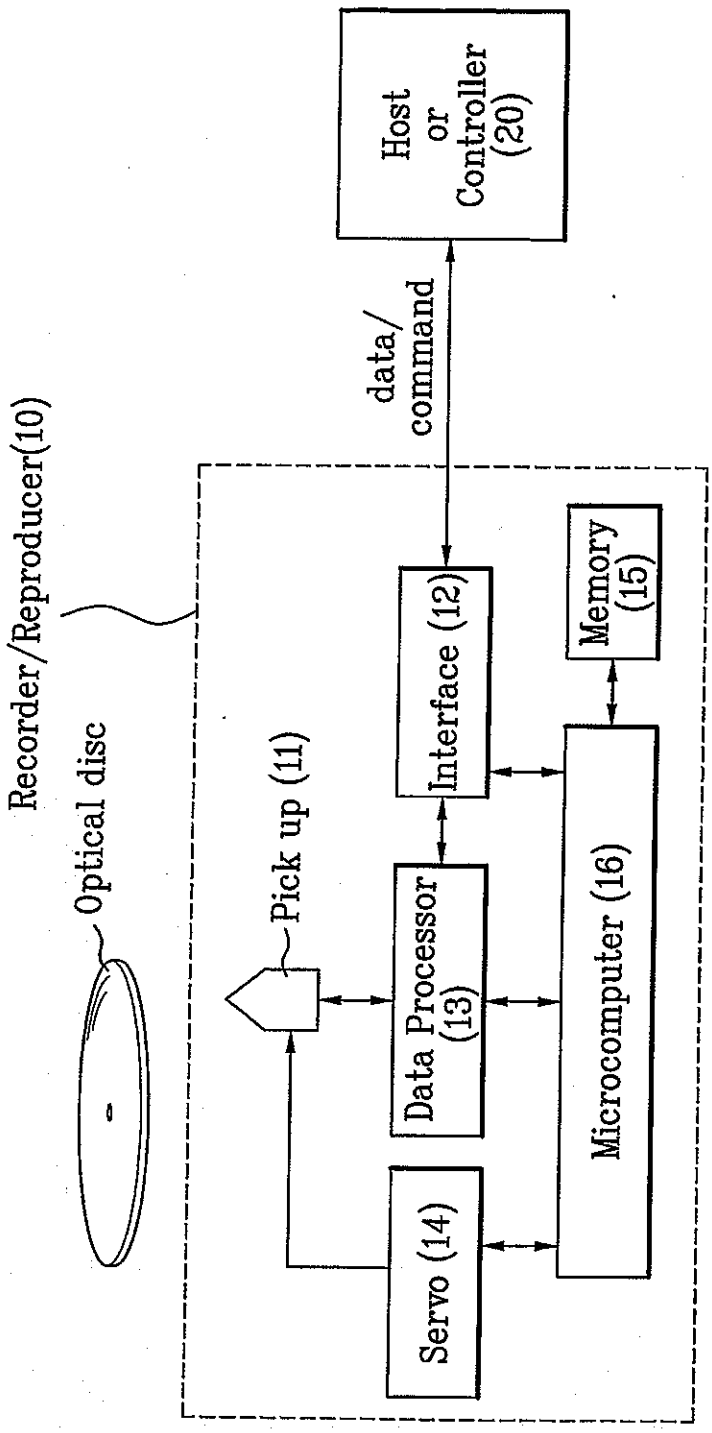
Disc Information (112 bytes)

Byte number	contents	Number of bytes
0	Disc Information identifier = "DI"	2
5	DI frame sequence number in DI block	1
. . .	. . .	. . .
N	Write strategy (WS) parameters	1
K	Write Stategy (WS) flag	1
Q	Best WS flag in Writing speed	1
P ~ 111	Write strategy (WS) parameters	

b7	b6	b5	b4	b3	b2	b1	b0
WS8	WS7	WS6	WS5	WS4	WS3	WS2	WS1
0b	0b	0b	0b	0b	0b	1b	0b

1b : this WS-type is best

FIG. 8


Host or Controller (20)
data/ command
Recorder/Reproducer(10)
Optical disc
Pick up (11)
Interface (12)
Memory (15)
Data Processor (13)
Microcomputer (16)
Servo (14)