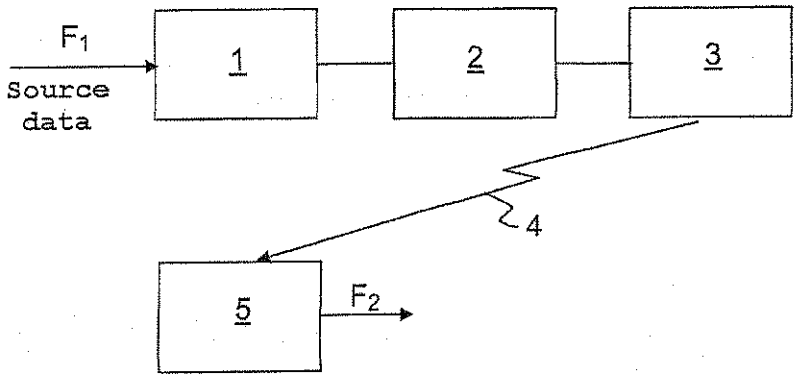

F1
Source data
1
2
3
4
5
F2

FIG.1

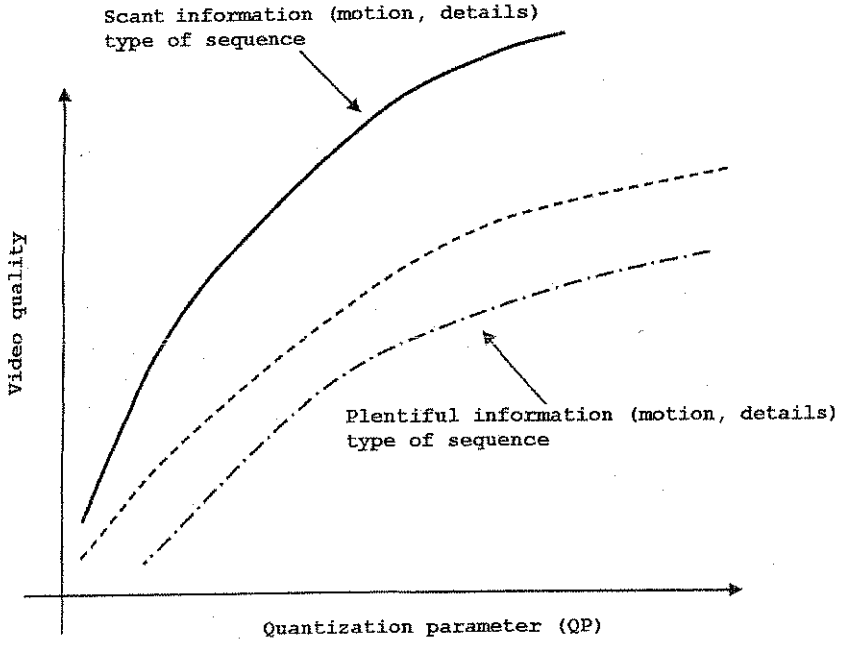

Scant information (motion, details) type of sequence
Video quality
Plentiful information (motion, details) type of sequence
Quantization parameter (QP)

FIG.2

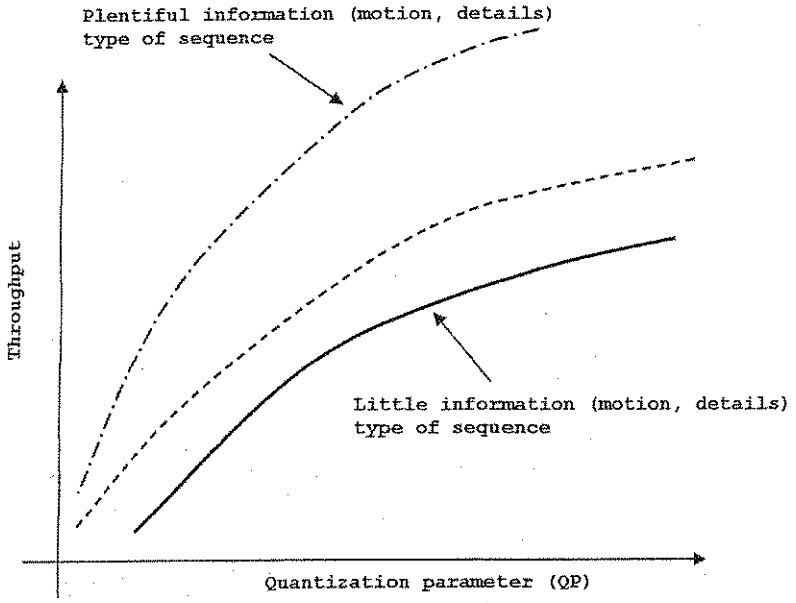

Plentiful information (motion, details)
type of sequence
Throughput
Little information (motion, details)
type of sequence
Quantization parameter (QP)

FIG.3

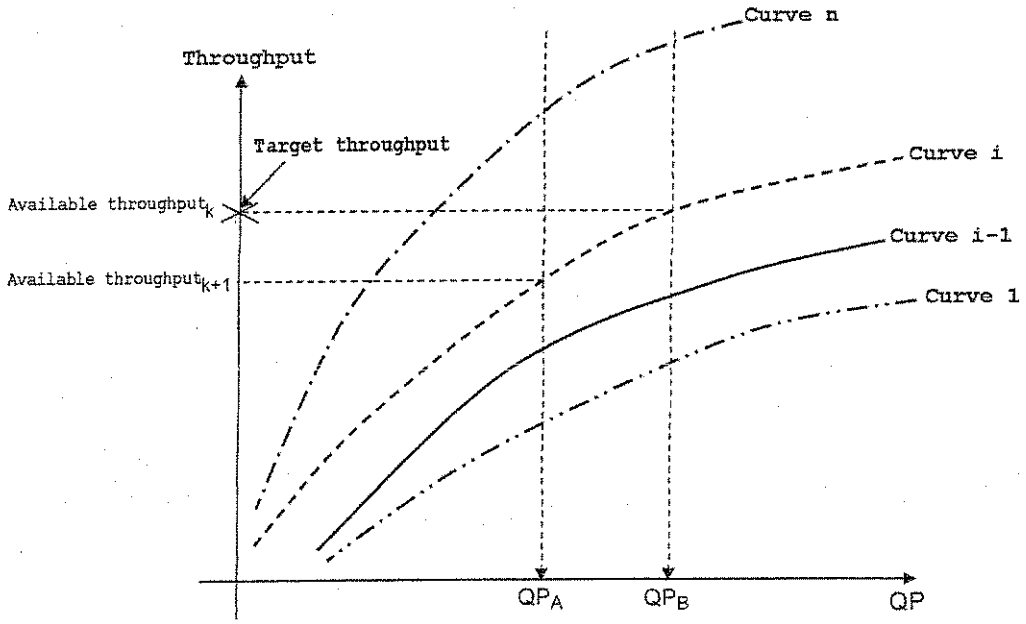

Curve n
Throughput
Target throughput
Curve i
Available throughput$_k$
Curve i-1
Available throughput$_{k+1}$
Curve 1
QP_A
QP_B
QP

FIG.4

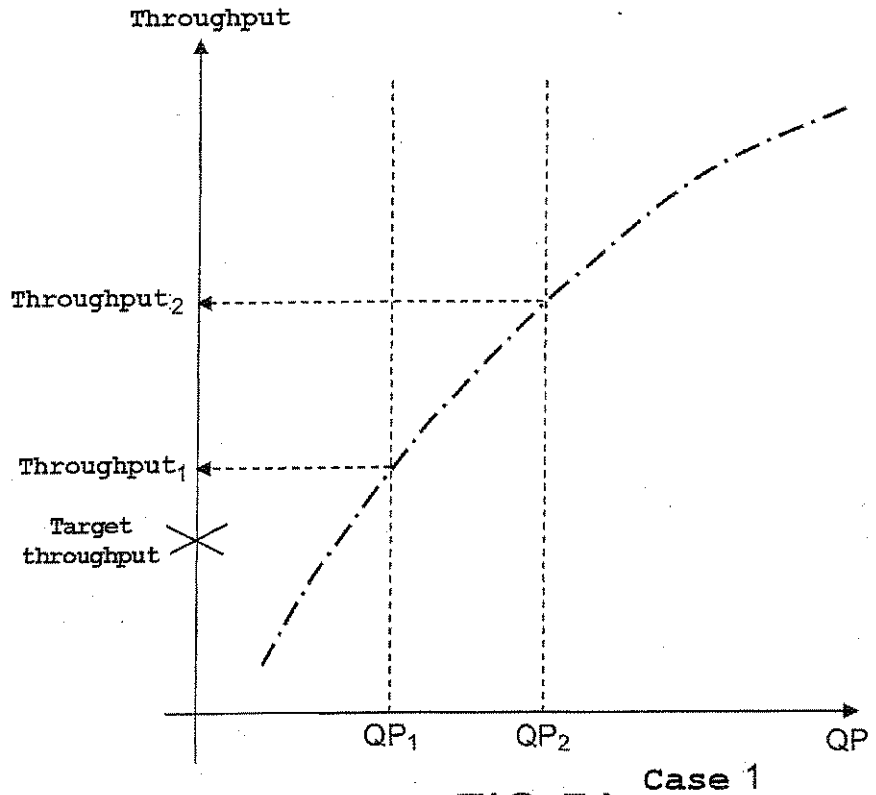

Throughput
Throughput2
Throughput1
Target throughput
QP1
QP2
QP
Case 1

FIG.5A

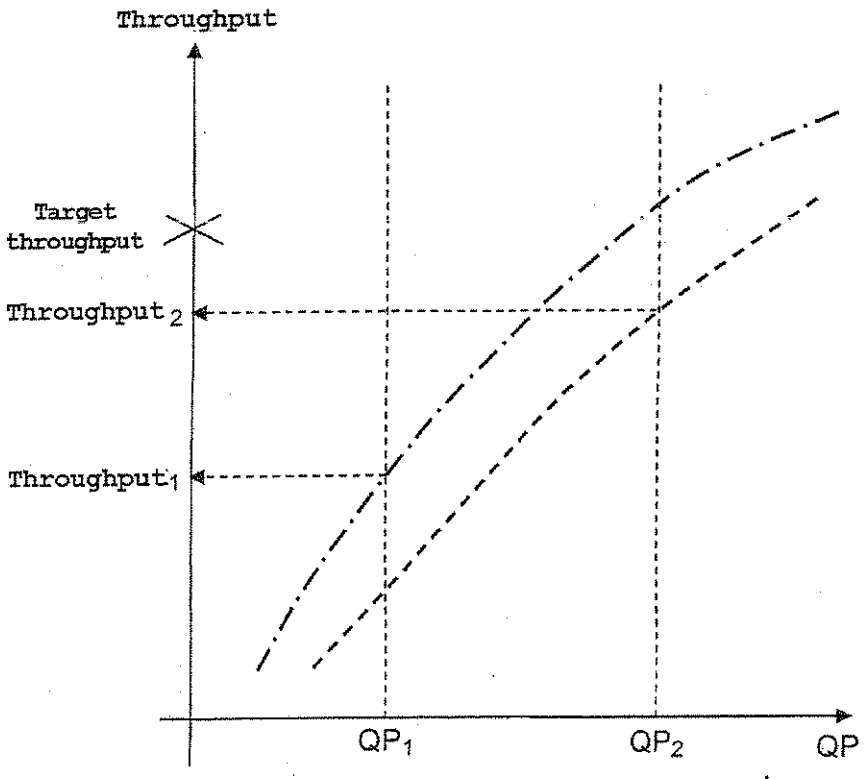

Throughput
Target throughput
Throughput2
Throughput1
QP1
QP2
QP
Case 1

FIG.5B

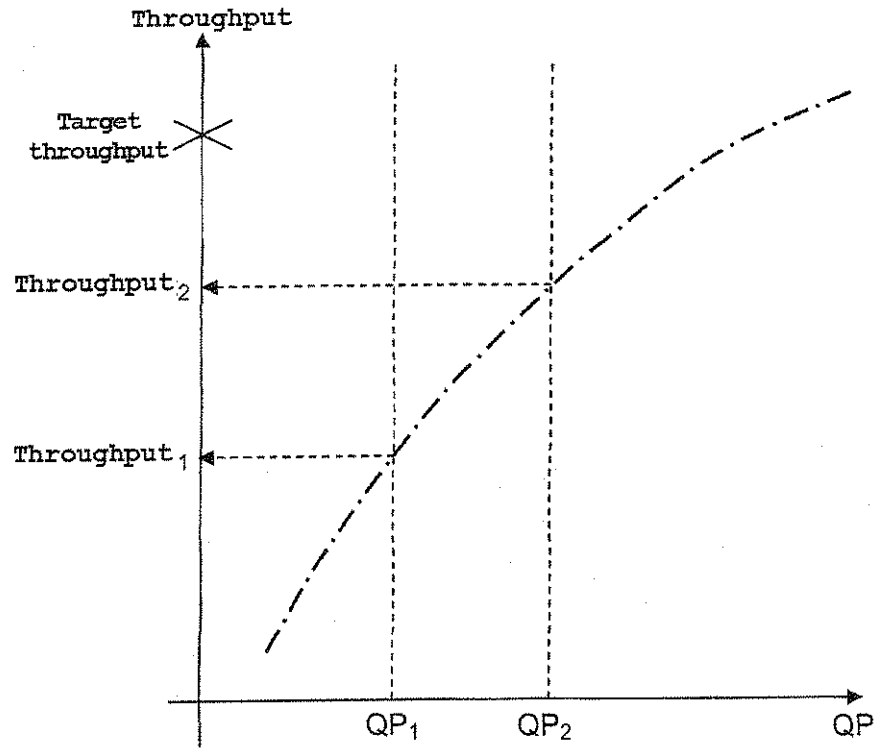


FIG.5C Case 2

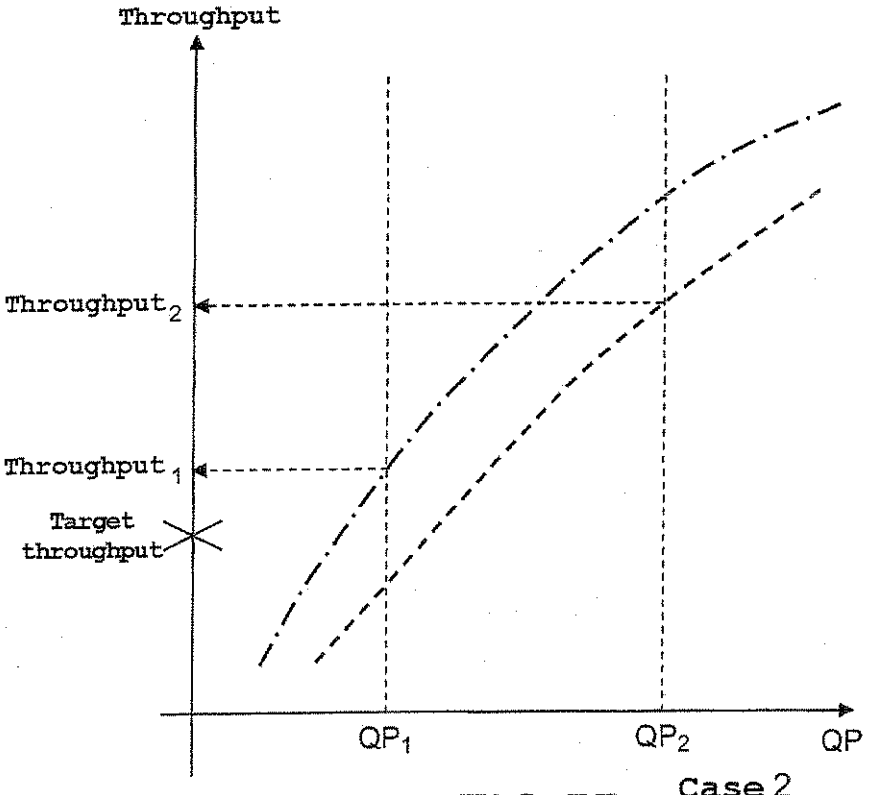


FIG.5D Case 2

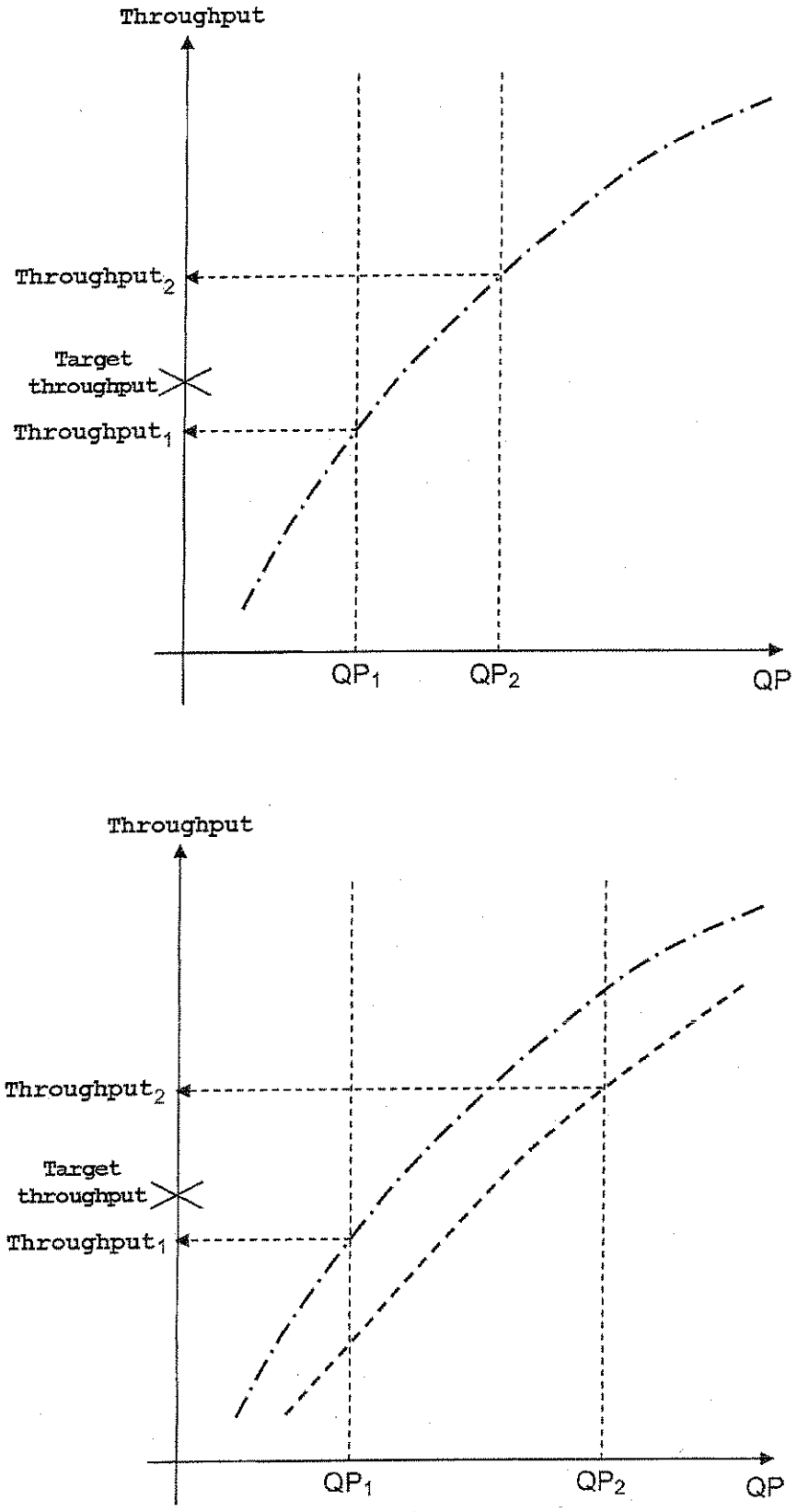

Throughput
Throughput2
Target throughput
Throughput1
QP1
QP2
QP
Throughput
Throughput2
Target throughput
Throughput1
QP1
QP2
QP

FIG.6

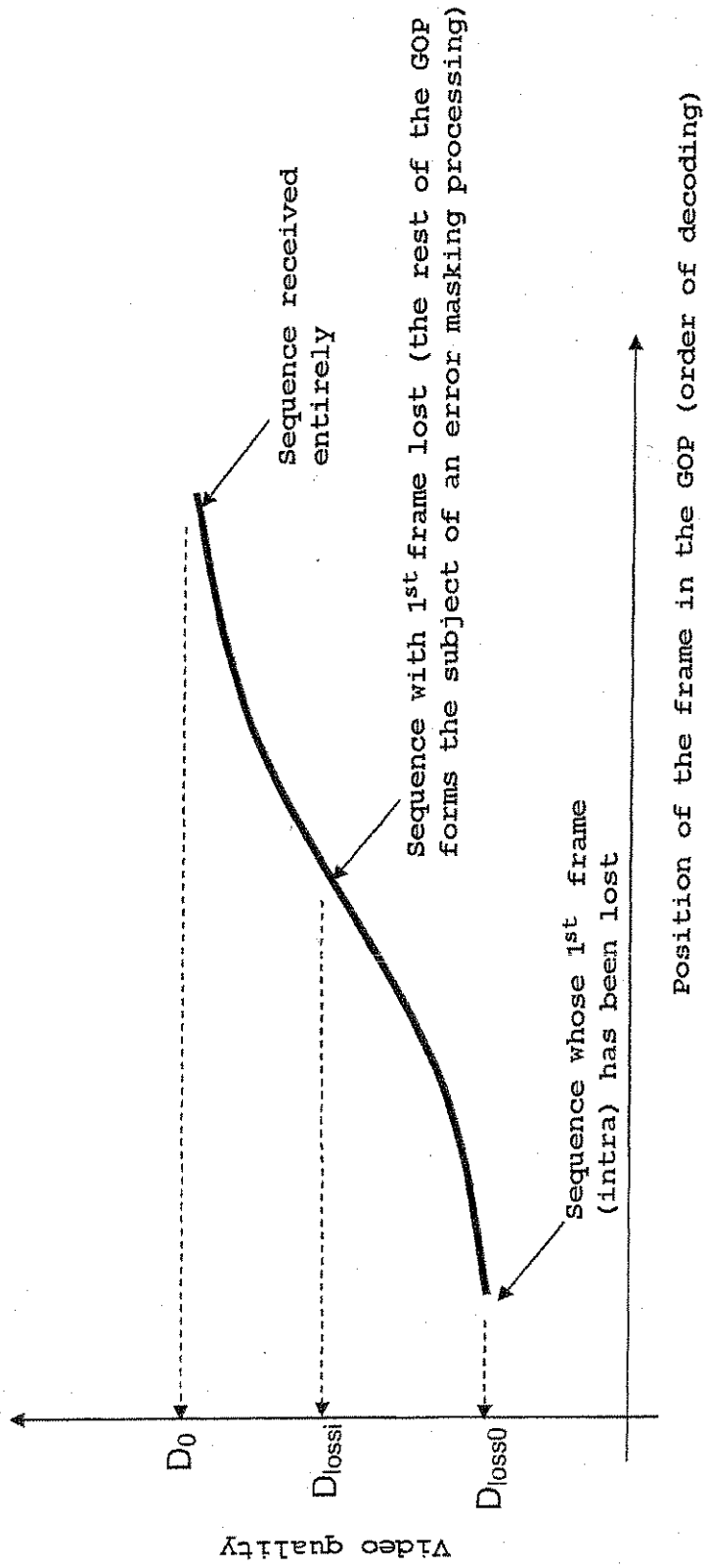

Video quality
D_0
D_{lossi}
D_{loss0}
Sequence received entirely
Sequence with 1st frame lost (the rest of the GOP forms the subject of an error masking processing)
Sequence whose 1st frame (intra) has been lost
Position of the frame in the GOP (order of decoding)

FIG.7

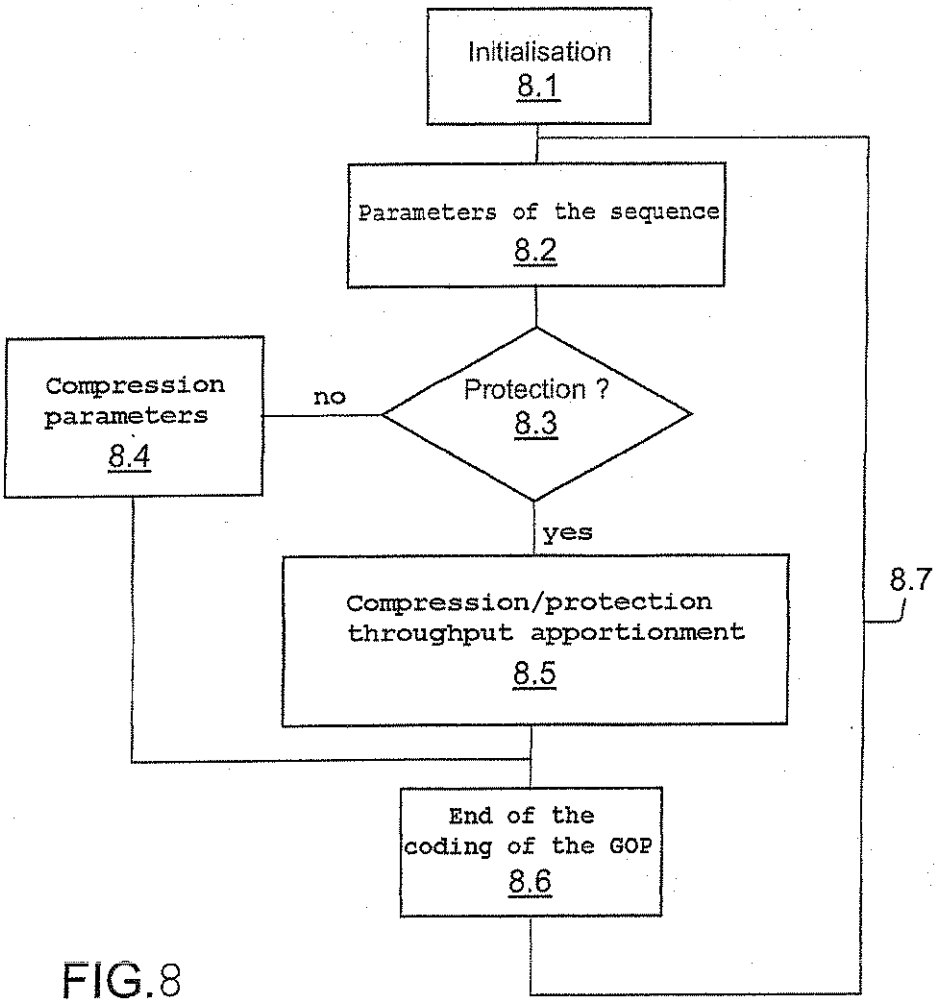

Initialisation
8.1
Parameters of the sequence
8.2
Protection ?
8.3
no
Compression parameters
8.4
yes
Compression/protection throughput apportionment
8.5
End of the coding of the GOP
8.6
8.7

FIG.8

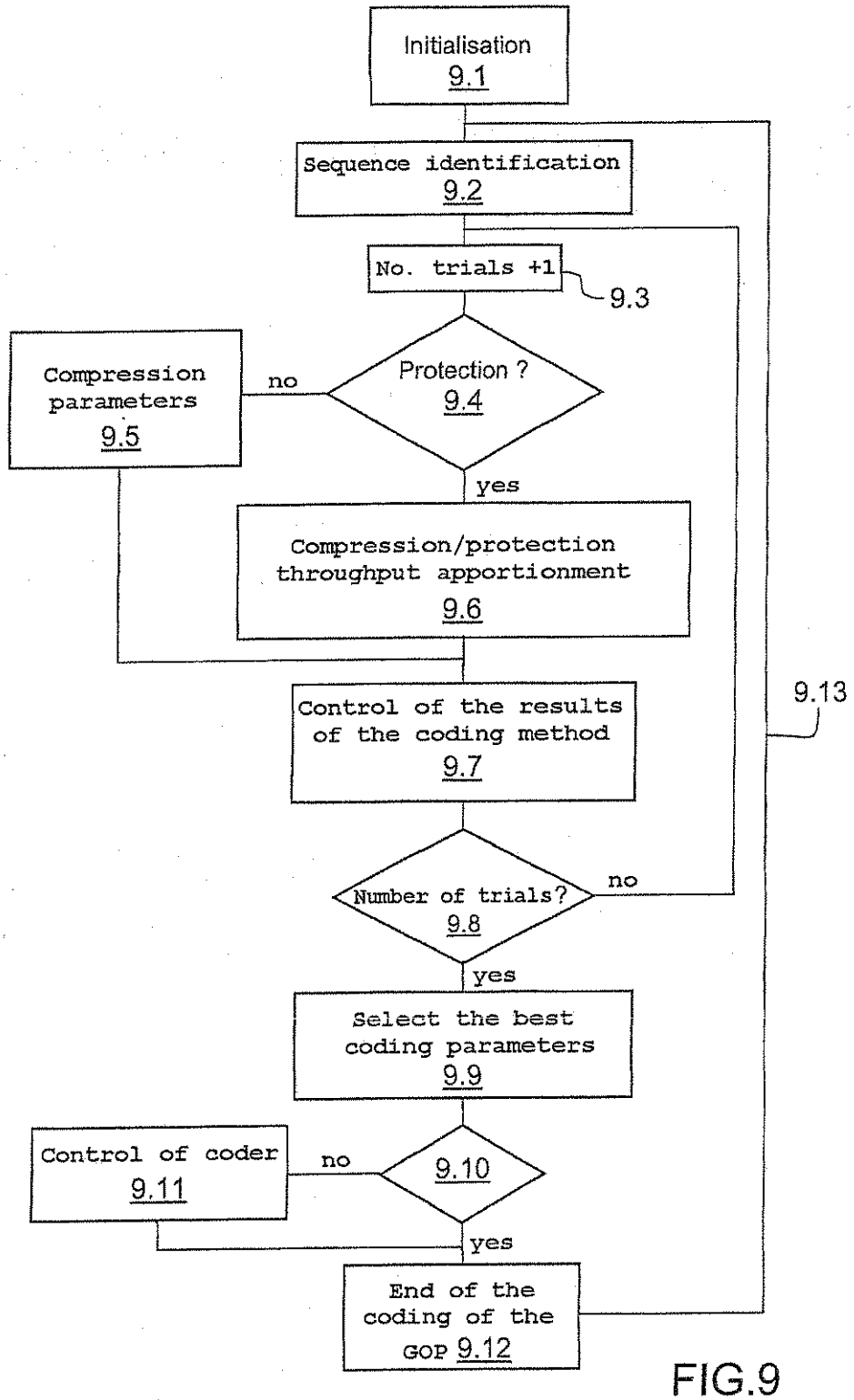

Initialisation
9.1
Sequence identification
9.2
No. trials +1
9.3
Protection ?
9.4
no
Compression parameters
9.5
yes
Compression/protection throughput apportionment
9.6
Control of the results of the coding method
9.7
Number of trials?
9.8
no
yes
Select the best coding parameters
9.9
Control of coder
9.11
no
9.10
yes
End of the coding of the GOP 9.12
9.13

FIG.9

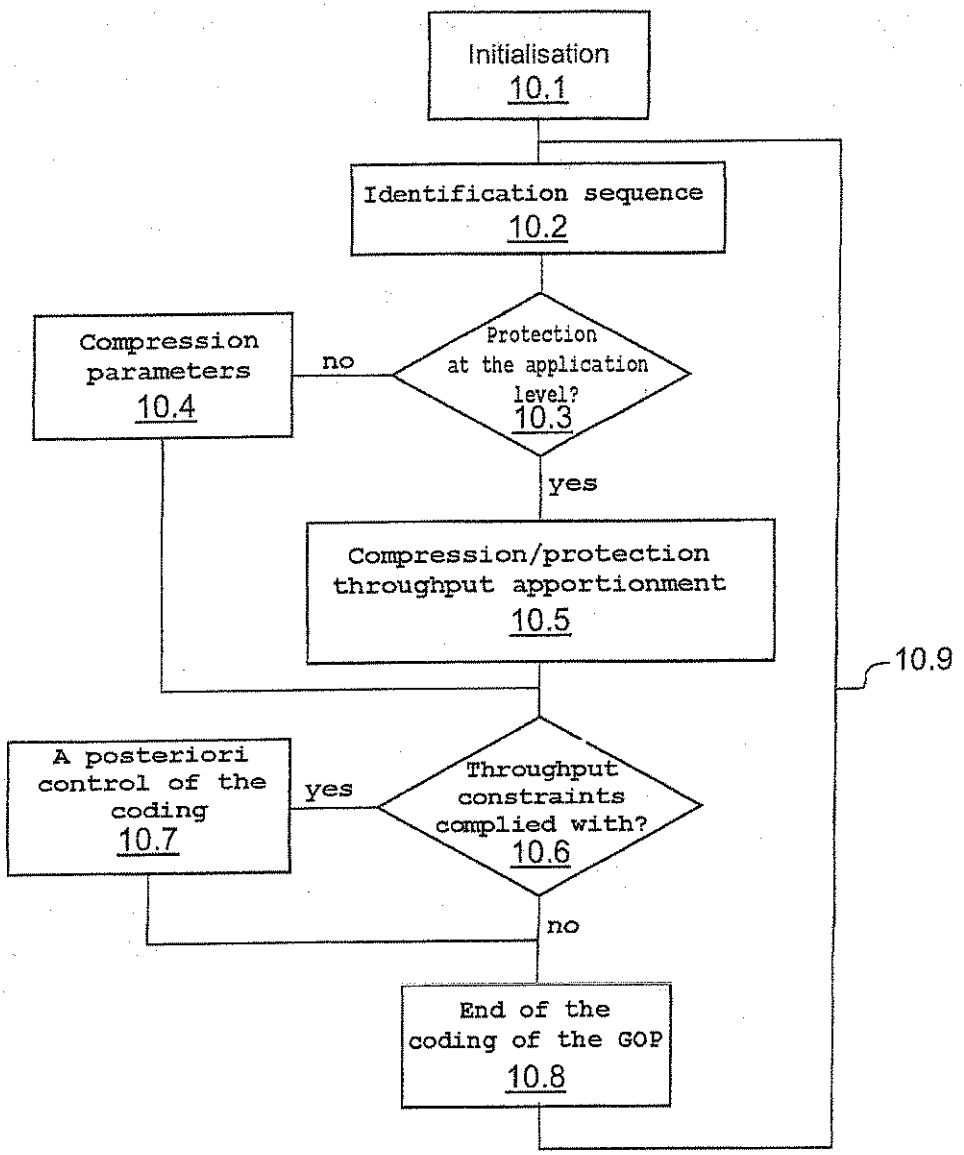

Initialisation
10.1
Identification sequence
10.2
Protection at the application level?
10.3
no
Compression parameters
10.4
yes
Compression/protection throughput apportionment
10.5
10.9
Throughput constraints complied with?
10.6
yes
A posteriori control of the coding
10.7
no
End of the coding of the GOP
10.8

FIG.10

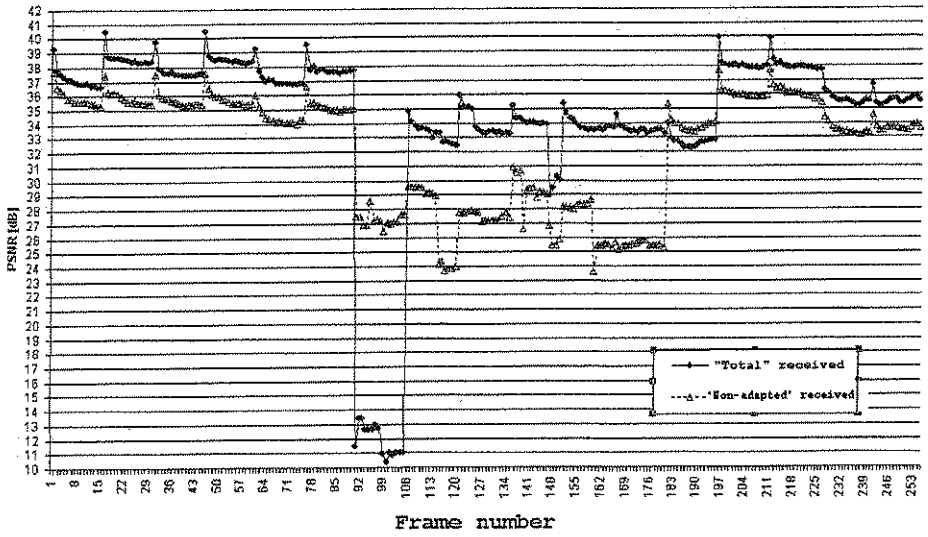

PSNR [dB]
Frame number
"Total" received
'Non-adapted' received

FIG.11

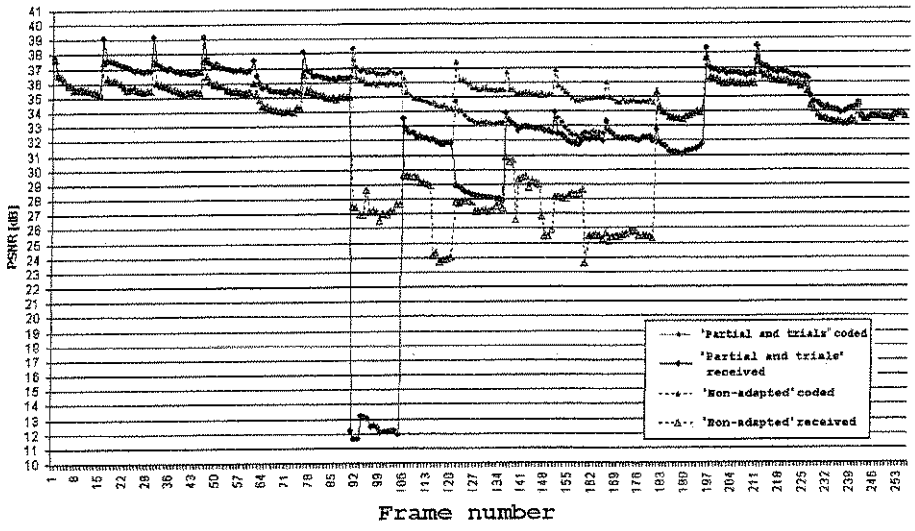

PSNR [dB]
Frame number
'Partial and trials' coded
'Partial and trials' received
'Non-adapted' coded
'Non-adapted' received

FIG.12

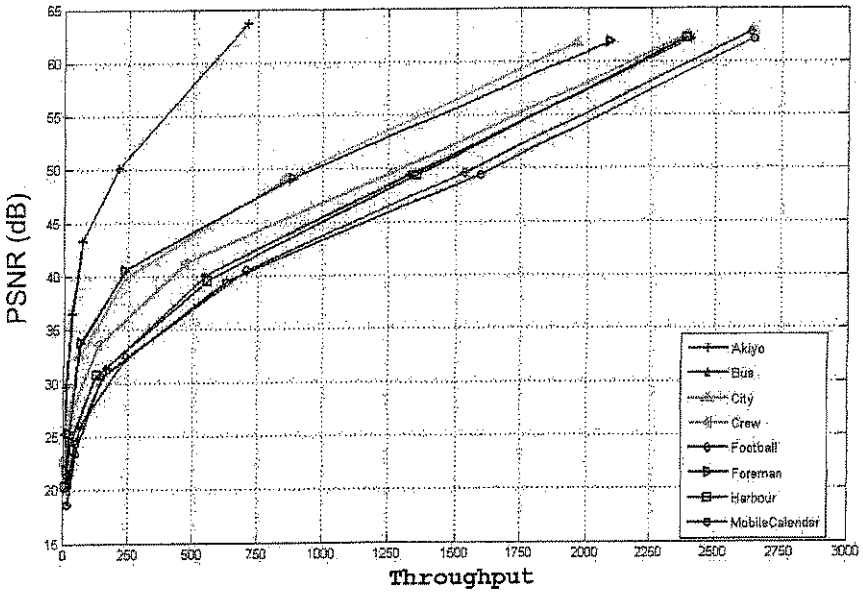

PSNR (dB)
Throughput
Akiyo
Bus
City
Crew
Football
Foreman
Harbour
MobileCalendar

FIG.13

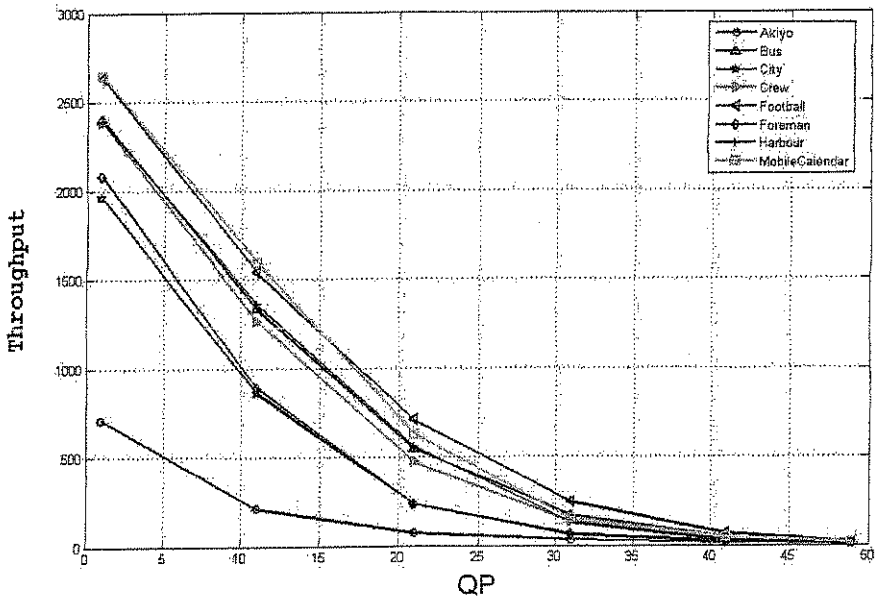

Throughput
QP
Akiyo
Bus
City
Crew
Football
Foreman
Harbour
MobileCalendar

FIG.14

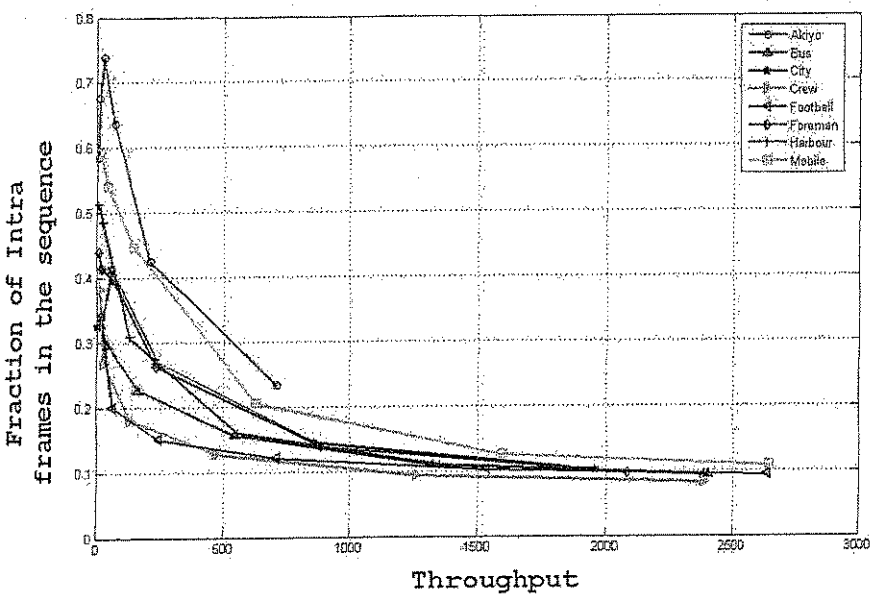

Fraction of Intra frames in the sequence
Throughput
Akiyo
Bus
City
Crew
Football
Foreman
Harbour
Mobile

FIG.15

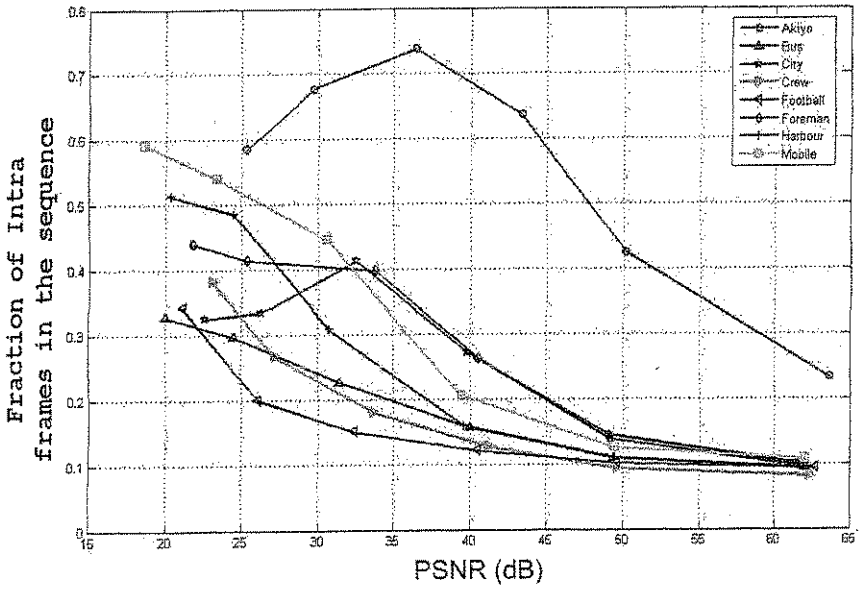

Fraction of Intra frames in the sequence
PSNR (dB)
Akiyo
Bus
City
Crew
Football
Foreman
Harbour
Mobile

FIG.16

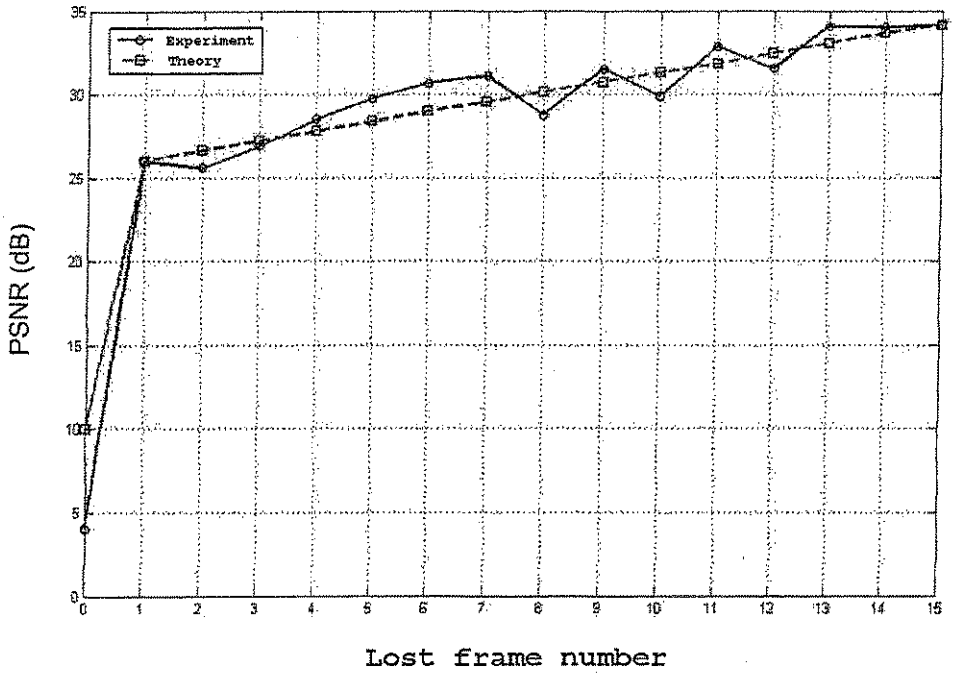

Experiment
Theory
PSNR (dB)
Lost frame number
0
5
10
15
20
25
30
35
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

FIG.17