FIG. 1A

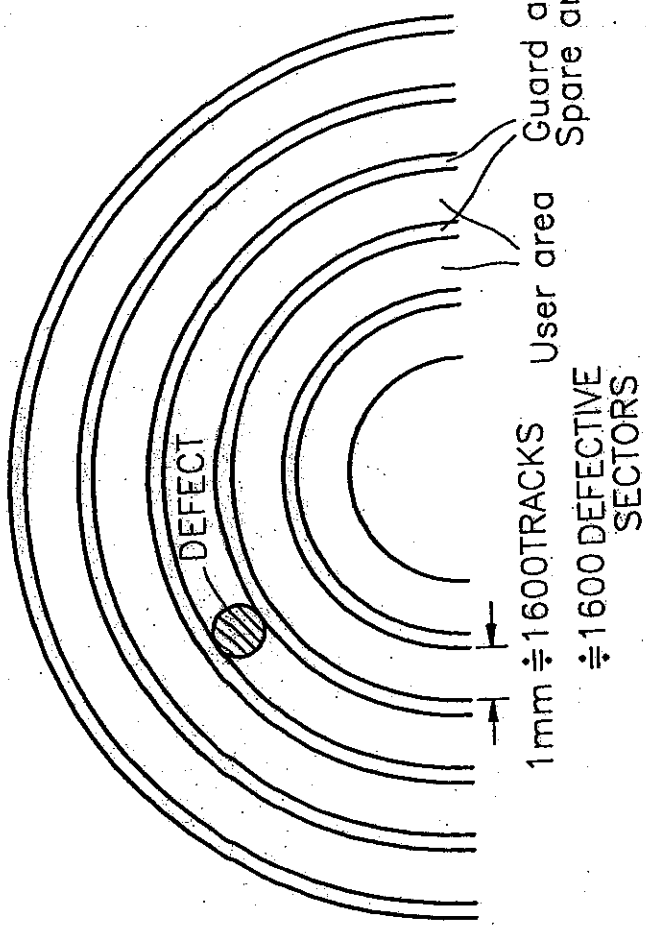

DEFECT
1mm ≒1600TRACKS
User area
Guard and Spare area
≒1600 DEFECTIVE SECTORS

FIG. 1B

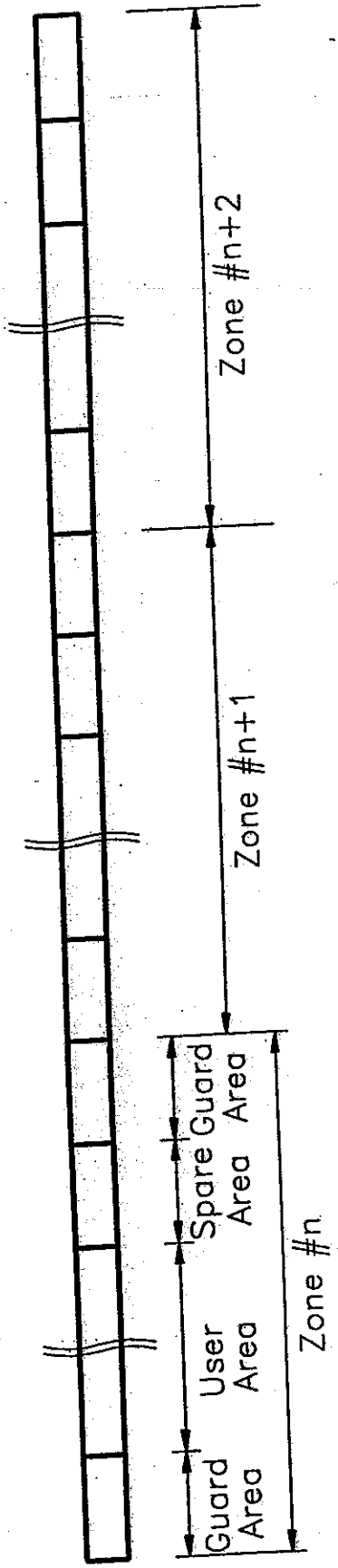

Zone #n+2
Zone #n+1
Zone #n
Guard Area
User Area
Spare Area
Guard Area

FIG. 2A

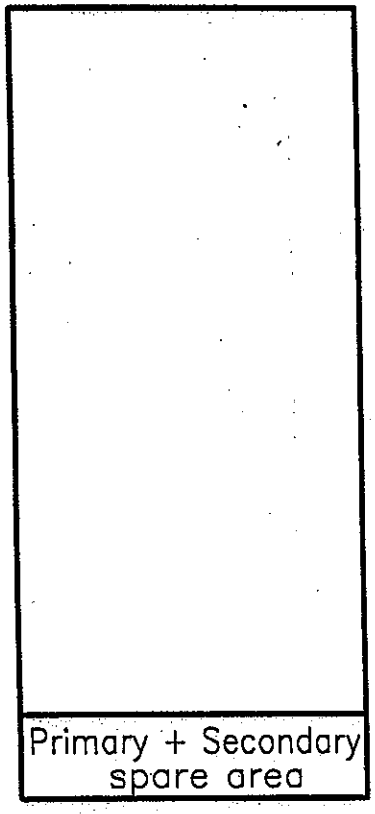


FIG. 2B

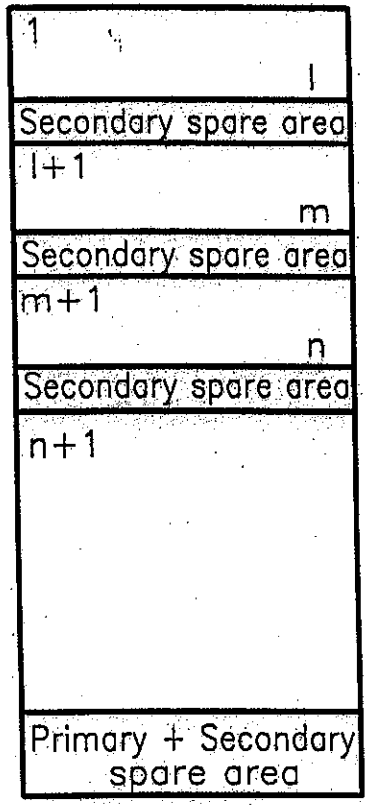
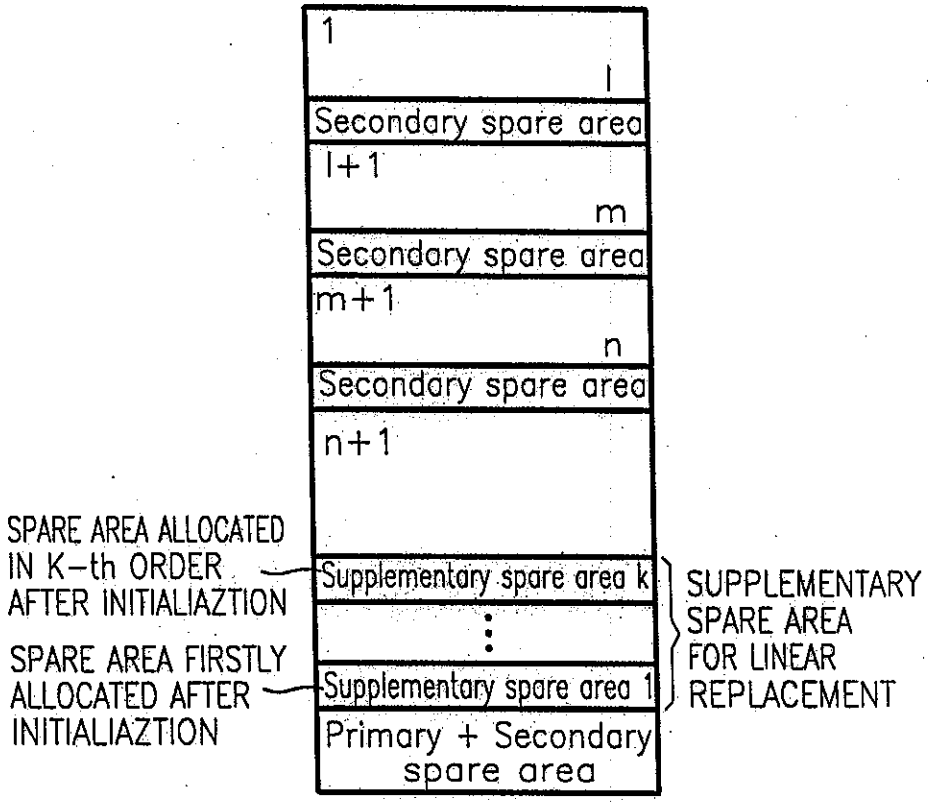


FIG. 2C



15/11/2006

FIG. 3A

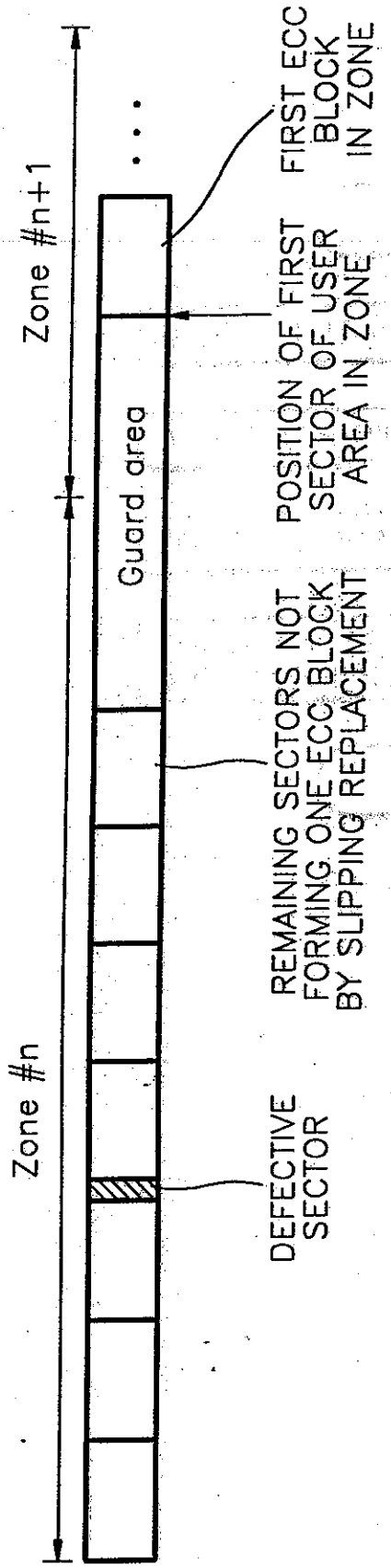

Zone #n+1
Guard area
Zone #n
FIRST ECC BLOCK IN ZONE
POSITION OF FIRST SECTOR OF USER AREA IN ZONE
REMAINING SECTORS NOT FORMING ONE ECC BLOCK BY SLIPPING REPLACEMENT
DEFECTIVE SECTOR

FIG. 3B

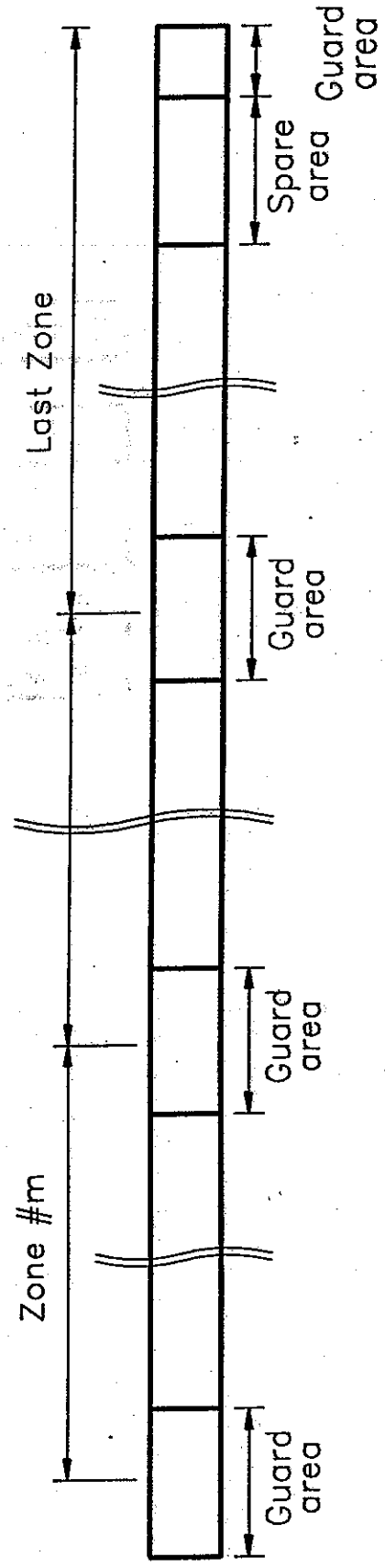

Last Zone
Zone #m
Spare area
Guard area
Guard area
Guard area
Guard area

FIG. 4

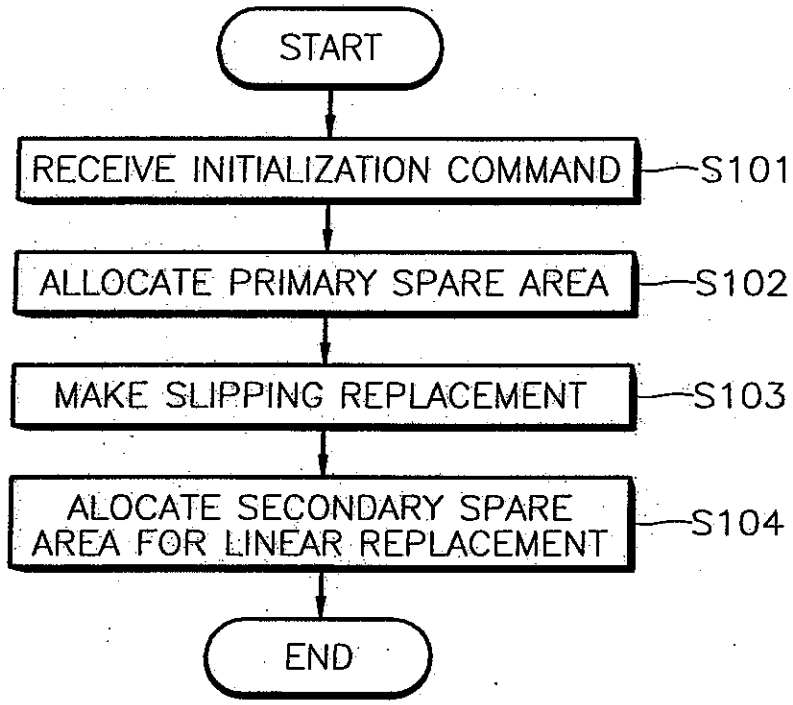
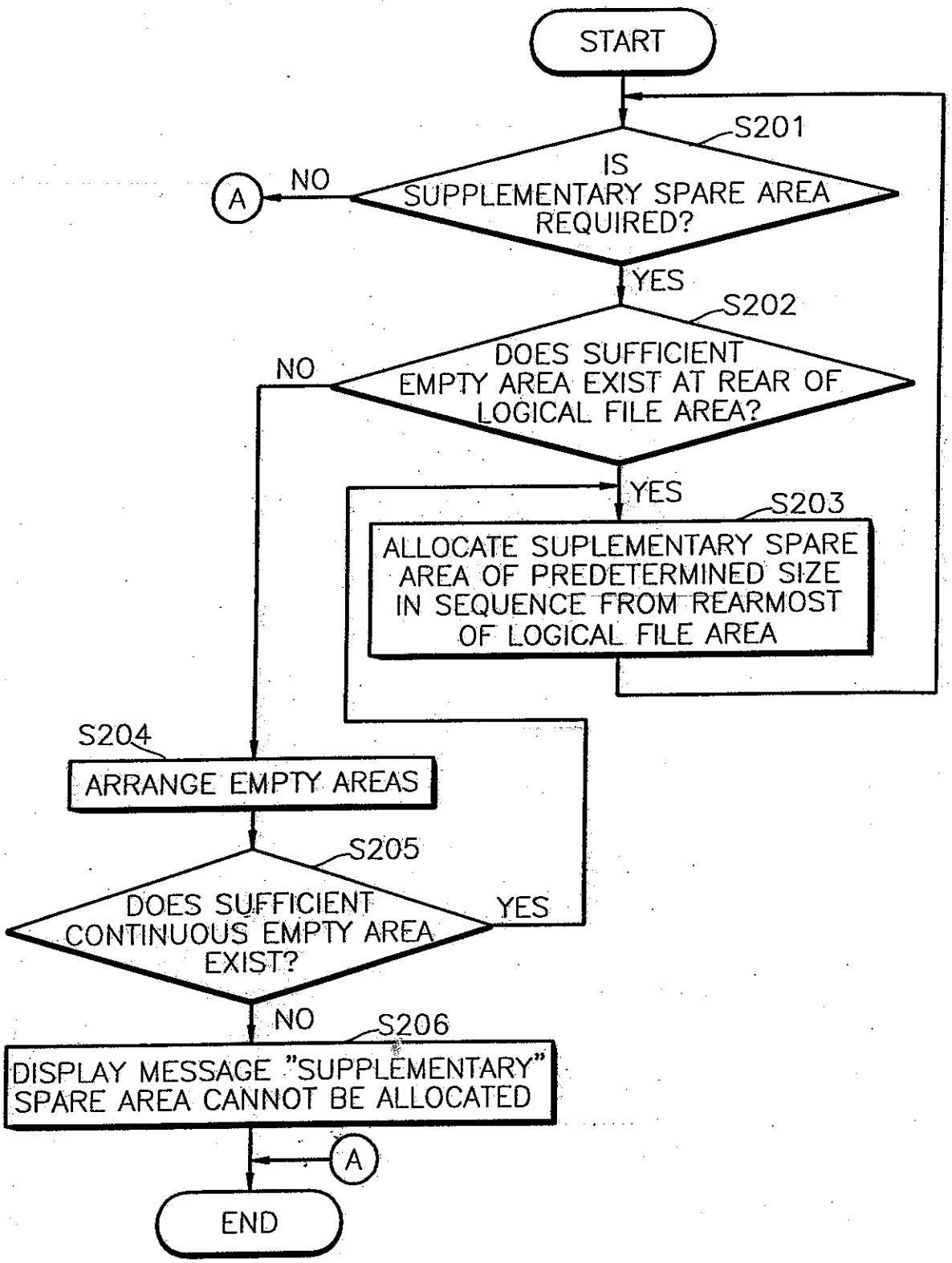

START
RECEIVE INITIALIZATION COMMAND
S101
ALLOCATE PRIMARY SPARE AREA
S102
MAKE SLIPPING REPLACEMENT
S103
ALOCATE SECONDARY SPARE AREA FOR LINEAR REPLACEMENT
S104
END

FIG. 5


START
S201
IS SUPPLEMENTARY SPARE AREA REQUIRED?
NO
A
YES
S202
DOES SUFFICIENT EMPTY AREA EXIST AT REAR OF LOGICAL FILE AREA?
NO
YES
S203
ALLOCATE SUPLEMENTARY SPARE AREA OF PREDETERMINED SIZE IN SEQUENCE FROM REARMOST OF LOGICAL FILE AREA
S204
ARRANGE EMPTY AREAS
S205
DOES SUFFICIENT CONTINUOUS EMPTY AREA EXIST?
YES
NO
S206
DISPLAY MESSAGE "SUPPLEMENTARY" SPARE AREA CANNOT BE ALLOCATED
A
END