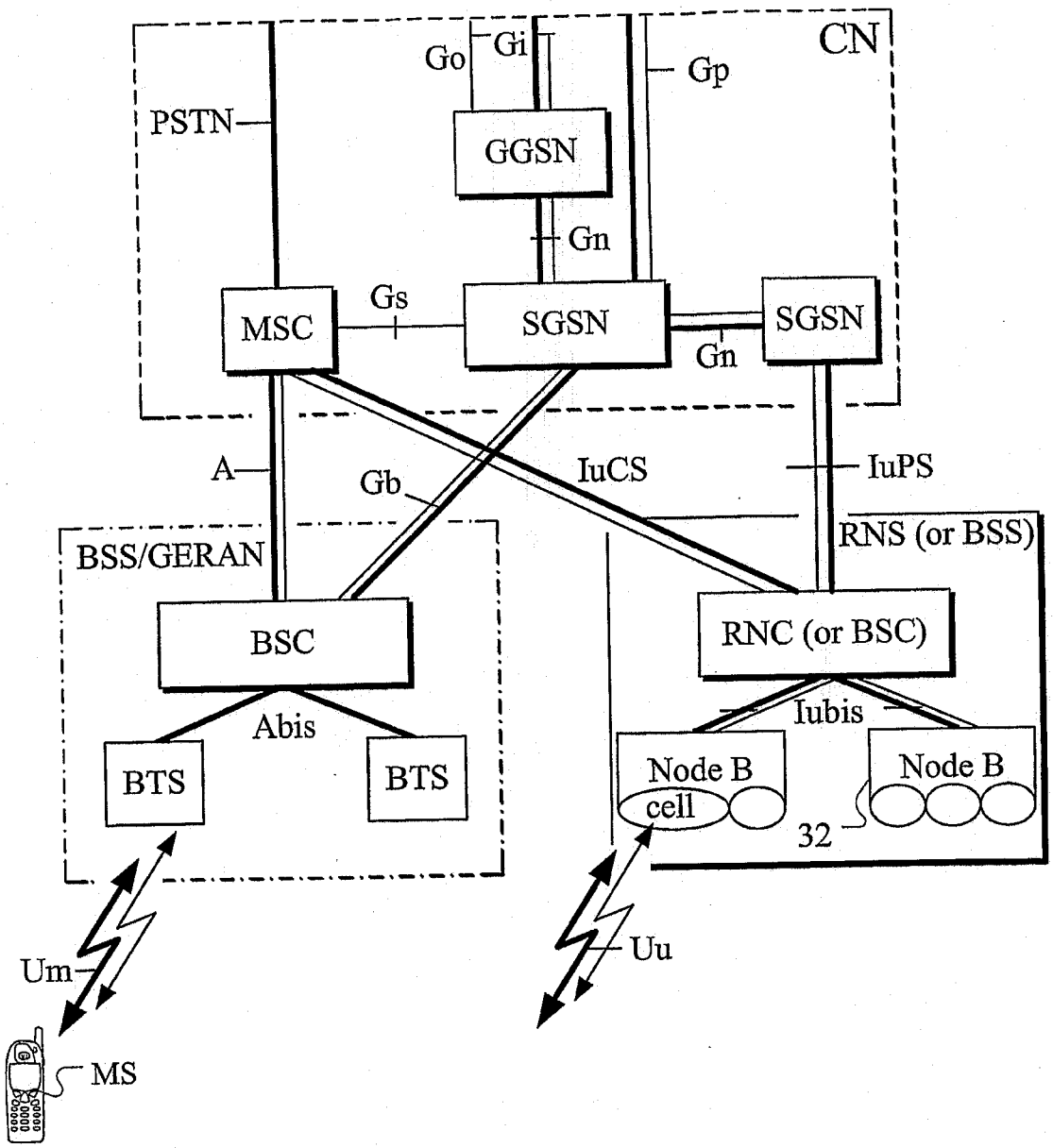


Bold lines: interfaces supporting user traffic.
Thin lines: interfaces supporting signalling.

NOTE: The Iu interface is also supported by GERAN BSS supporting Iu mode.

FIG. 1
(PRIOR ART)

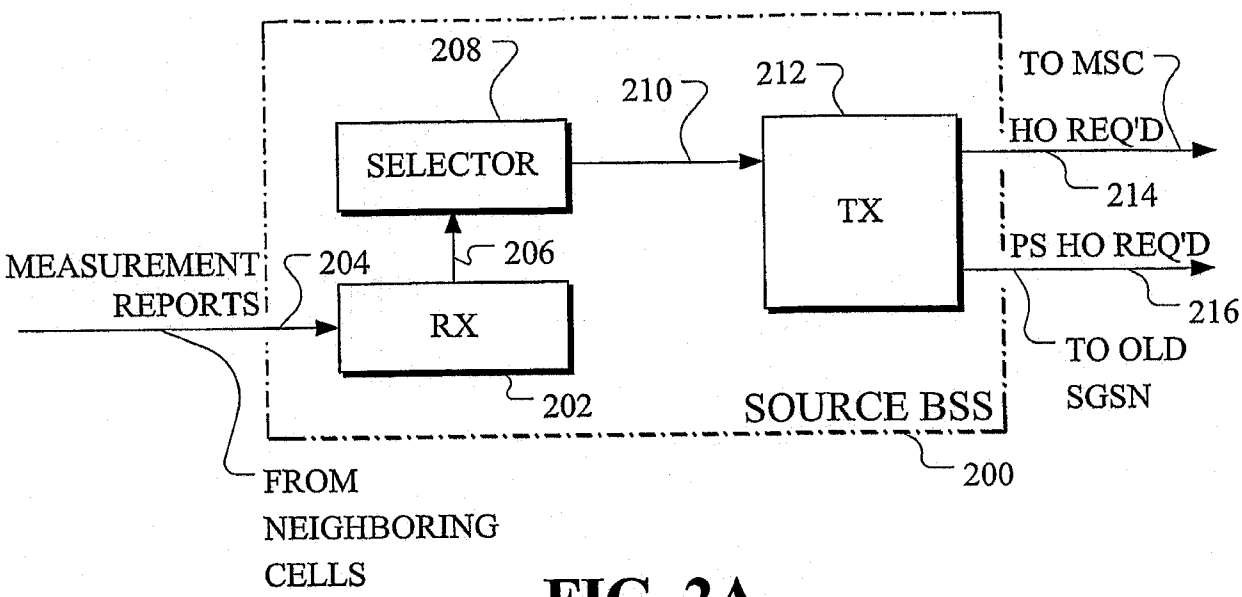

208
210
212
TO MSC
HO REQ'D
SELECTOR
TX
214
MEASUREMENT REPORTS
204
206
PS HO REQ'D
RX
216
TO OLD SGSN
202
SOURCE BSS
200
FROM NEIGHBORING CELLS

FIG. 2A

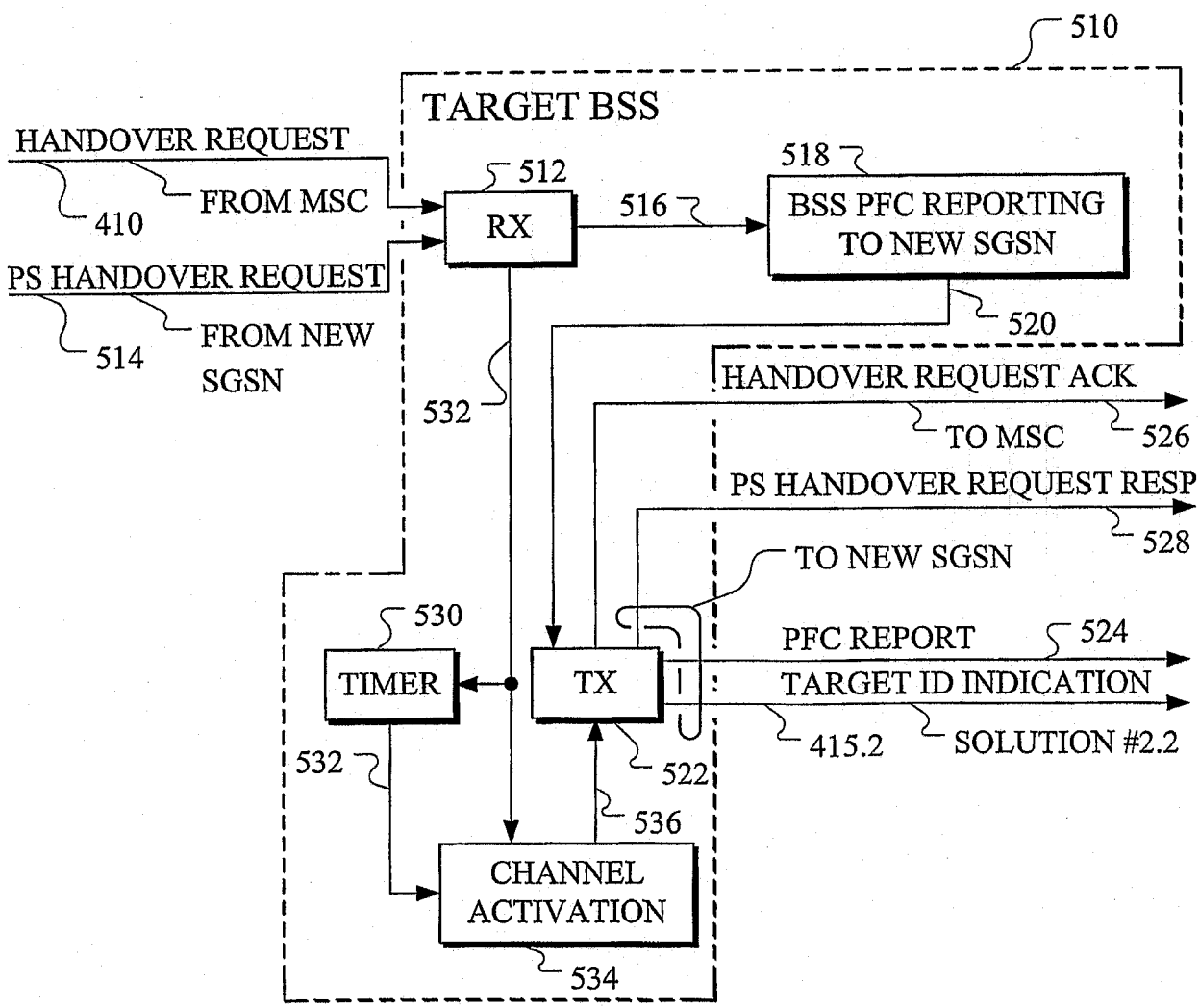

510
TARGET BSS
HANDOVER REQUEST
512
518
FROM MSC
410
RX
516
BSS PFC REPORTING TO NEW SGSN
PS HANDOVER REQUEST
520
514
FROM NEW SGSN
HANDOVER REQUEST ACK
532
TO MSC
526
PS HANDOVER REQUEST RESP
528
TO NEW SGSN
530
PFC REPORT
524
TIMER
TX
TARGET ID INDICATION
415.2
SOLUTION #2.2
532
522
536
CHANNEL ACTIVATION
534

FIG. 2B

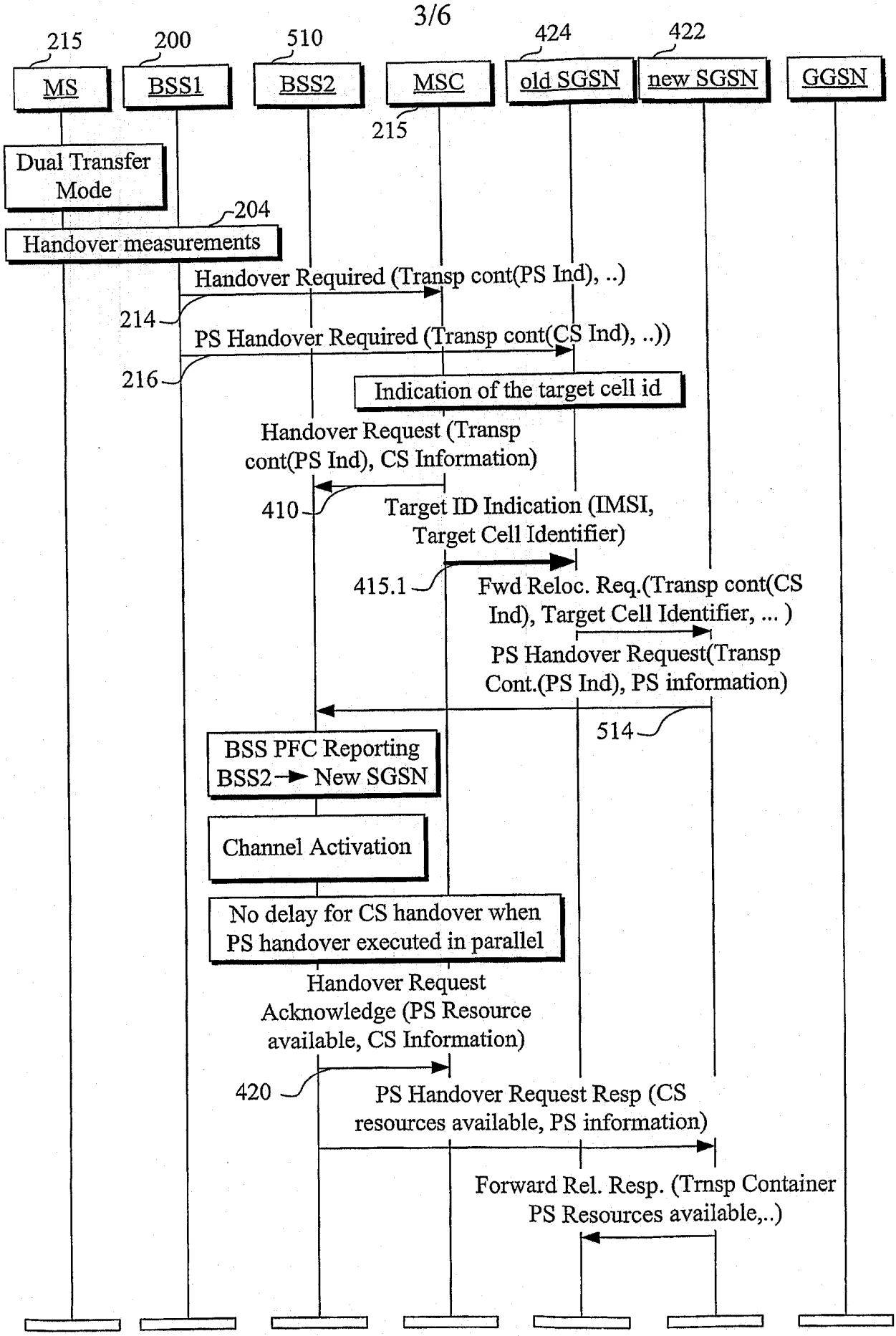

215
200
510
424
422
MS
BSS1
BSS2
MSC
old SGSN
new SGSN
GGSN
215
Dual Transfer Mode
204
Handover measurements
Handover Required (Transp cont(PS Ind), ..)
214
PS Handover Required (Transp cont(CS Ind), ..))
216
Indication of the target cell id
Handover Request (Transp cont(PS Ind), CS Information)
410
Target ID Indication (IMSI, Target Cell Identifier)
415.1
Fwd Reloc. Req.(Transp cont(CS Ind), Target Cell Identifier, ...)
PS Handover Request(Transp Cont.(PS Ind), PS information)
514
BSS PFC Reporting BSS2→ New SGSN
Channel Activation
No delay for CS handover when PS handover executed in parallel
Handover Request Acknowledge (PS Resource available, CS Information)
420
PS Handover Request Resp (CS resources available, PS information)
Forward Rel. Resp. (Trnsp Container PS Resources available,..)

FIG. 3

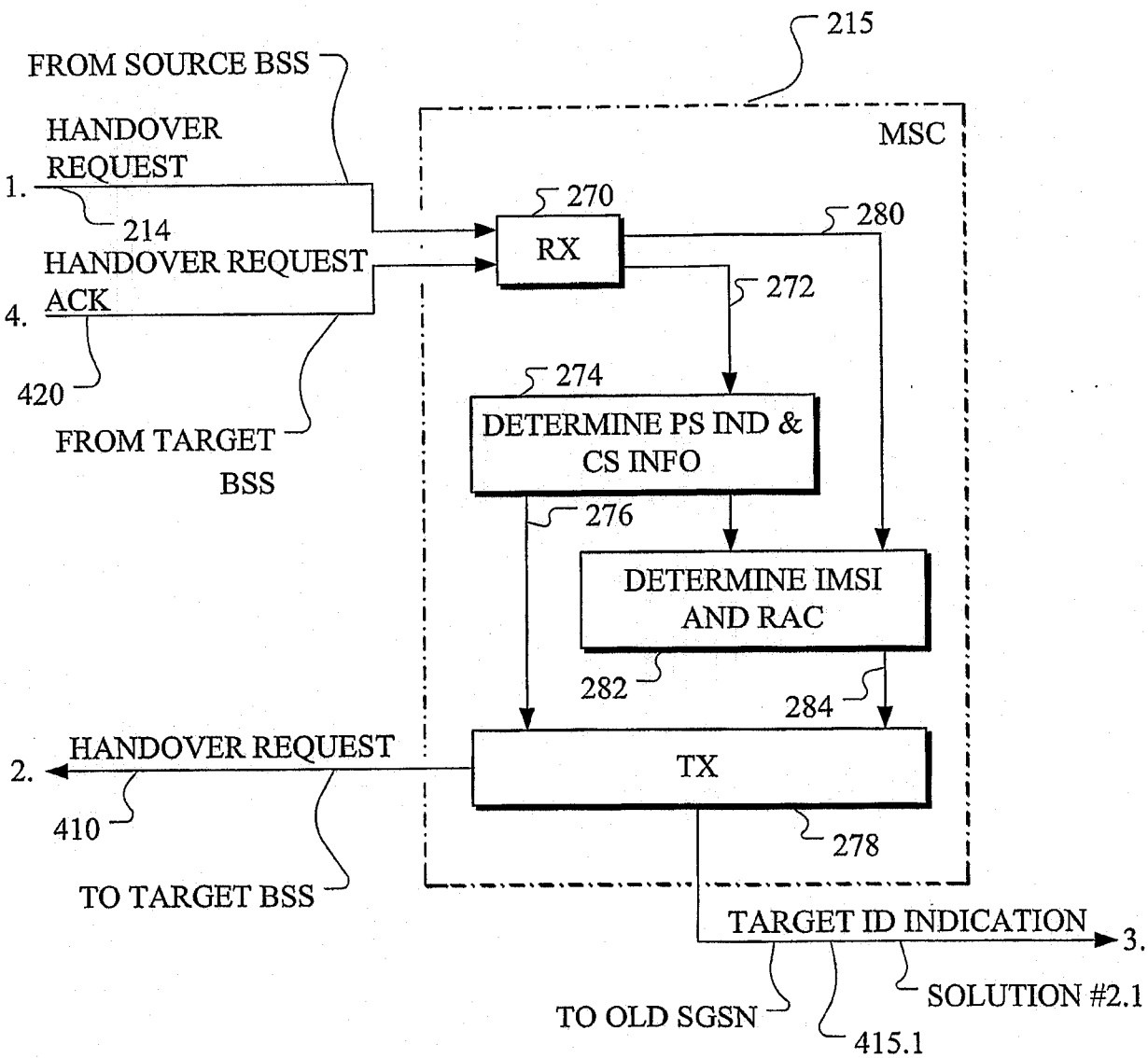

215
FROM SOURCE BSS
HANDOVER REQUEST
1.
214
HANDOVER REQUEST ACK
4.
420
FROM TARGET BSS
MSC
270
RX
280
272
274
DETERMINE PS IND & CS INFO
276
DETERMINE IMSI AND RAC
282
284
HANDOVER REQUEST
2.
410
TO TARGET BSS
TX
278
TARGET ID INDICATION
3.
TO OLD SGSN
415.1
SOLUTION #2.1

FIG. 4

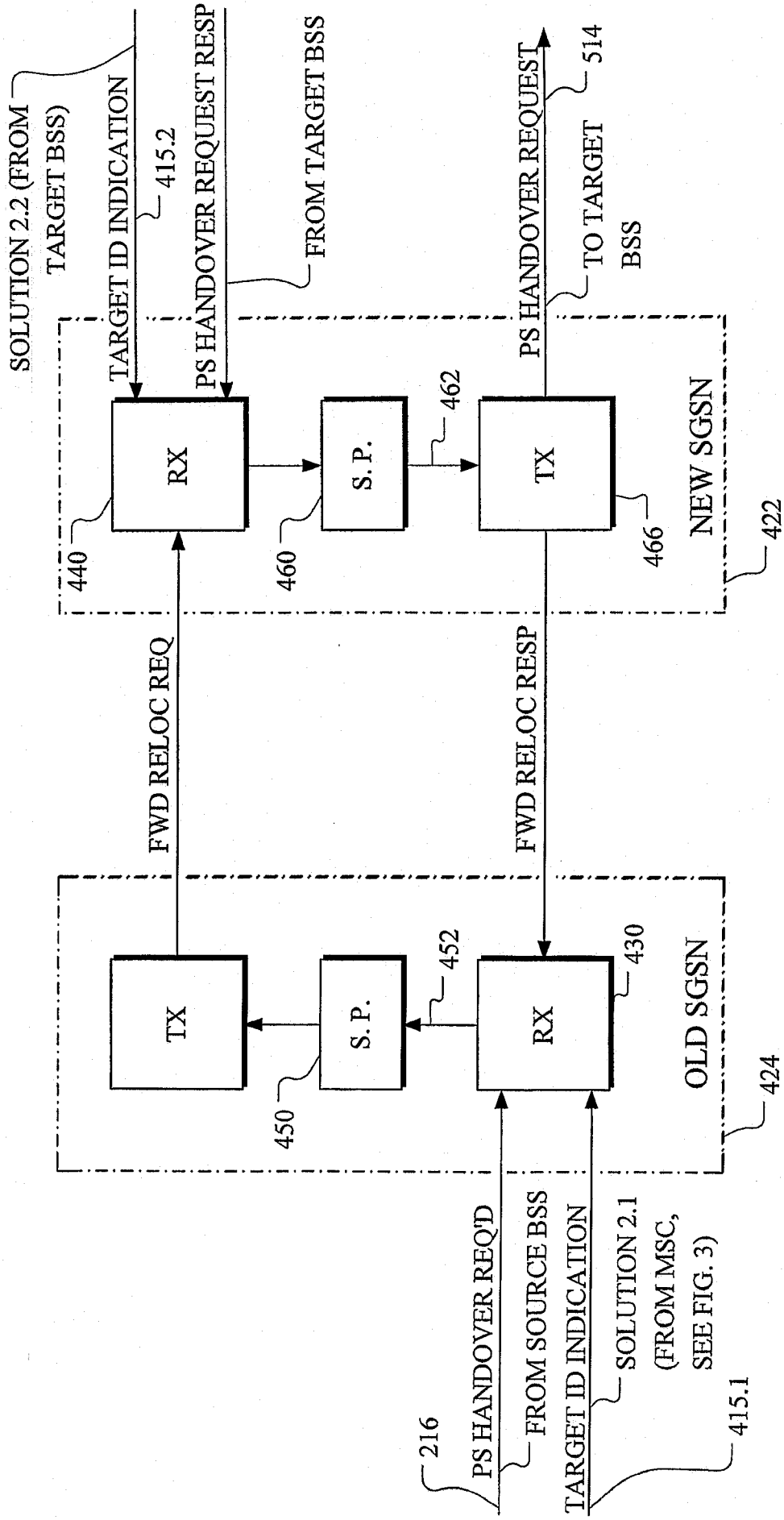

SOLUTION 2.2 (FROM TARGET BSS)
TARGET ID INDICATION
415.2
PS HANDOVER REQUEST RESP
FROM TARGET BSS
PS HANDOVER REQUEST
514
TO TARGET BSS
RX
S. P.
462
TX
440
460
466
NEW SGSN
422
FWD RELOC REQ
FWD RELOC RESP
TX
S. P.
452
RX
430
450
OLD SGSN
424
216
PS HANDOVER REQ'D
FROM SOURCE BSS
TARGET ID INDICATION
SOLUTION 2.1 (FROM MSC, SEE FIG. 3)
415.1

FIG. 5

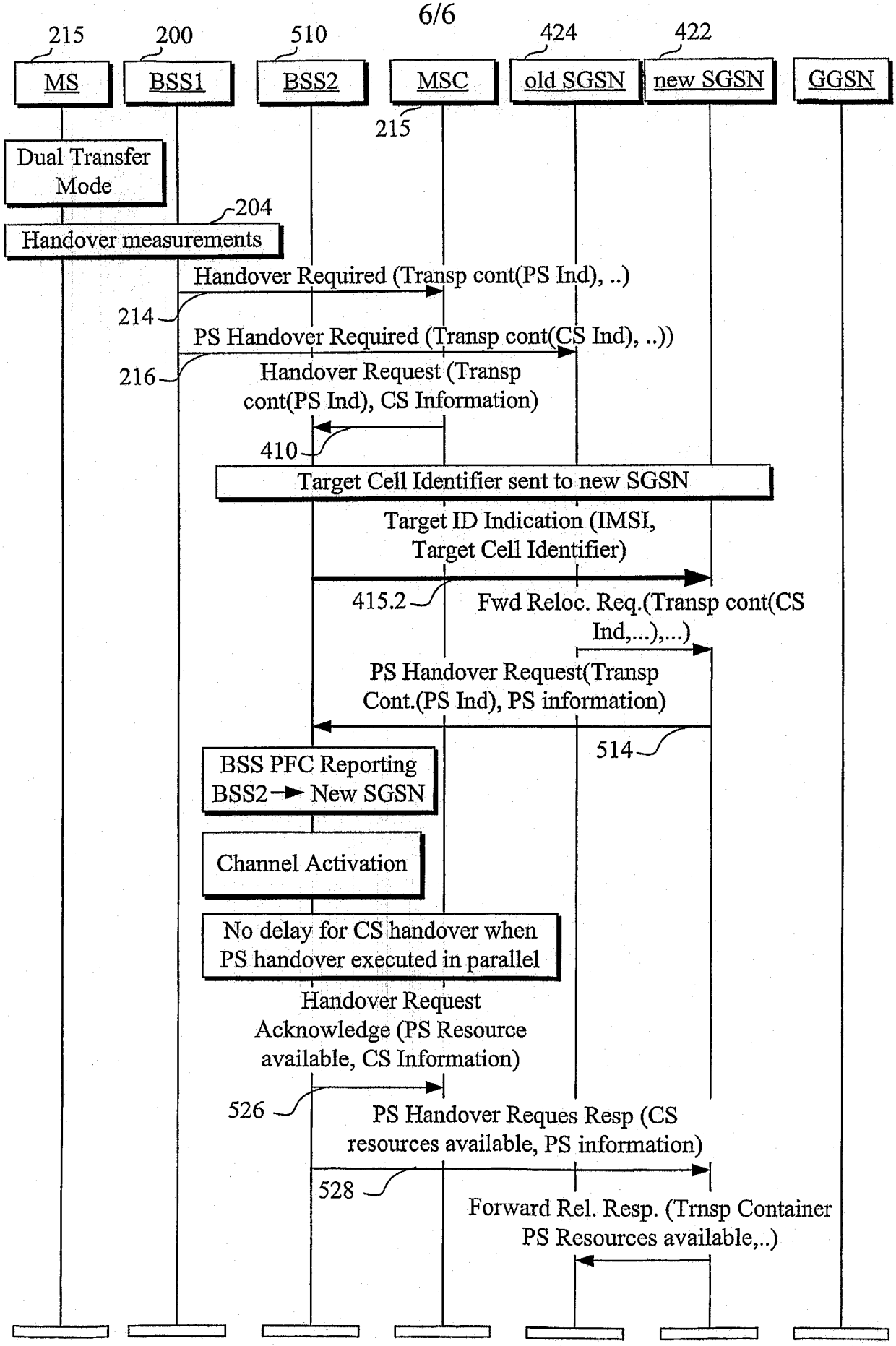

215
200
510
424
422
MS
BSS1
BSS2
MSC
old SGSN
new SGSN
GGSN
215
Dual Transfer Mode
204
Handover measurements
Handover Required (Transp cont(PS Ind), ..)
214
PS Handover Required (Transp cont(CS Ind), ..))
216
Handover Request (Transp cont(PS Ind), CS Information)
410
Target Cell Identifier sent to new SGSN
Target ID Indication (IMSI, Target Cell Identifier)
415.2
Fwd Reloc. Req.(Transp cont(CS Ind,...),...)
PS Handover Request(Transp Cont.(PS Ind), PS information)
514
BSS PFC Reporting BSS2 → New SGSN
Channel Activation
No delay for CS handover when PS handover executed in parallel
Handover Request Acknowledge (PS Resource available, CS Information)
526
PS Handover Reques Resp (CS resources available, PS information)
528
Forward Rel. Resp. (Trnsp Container PS Resources available,..)

FIG. 6