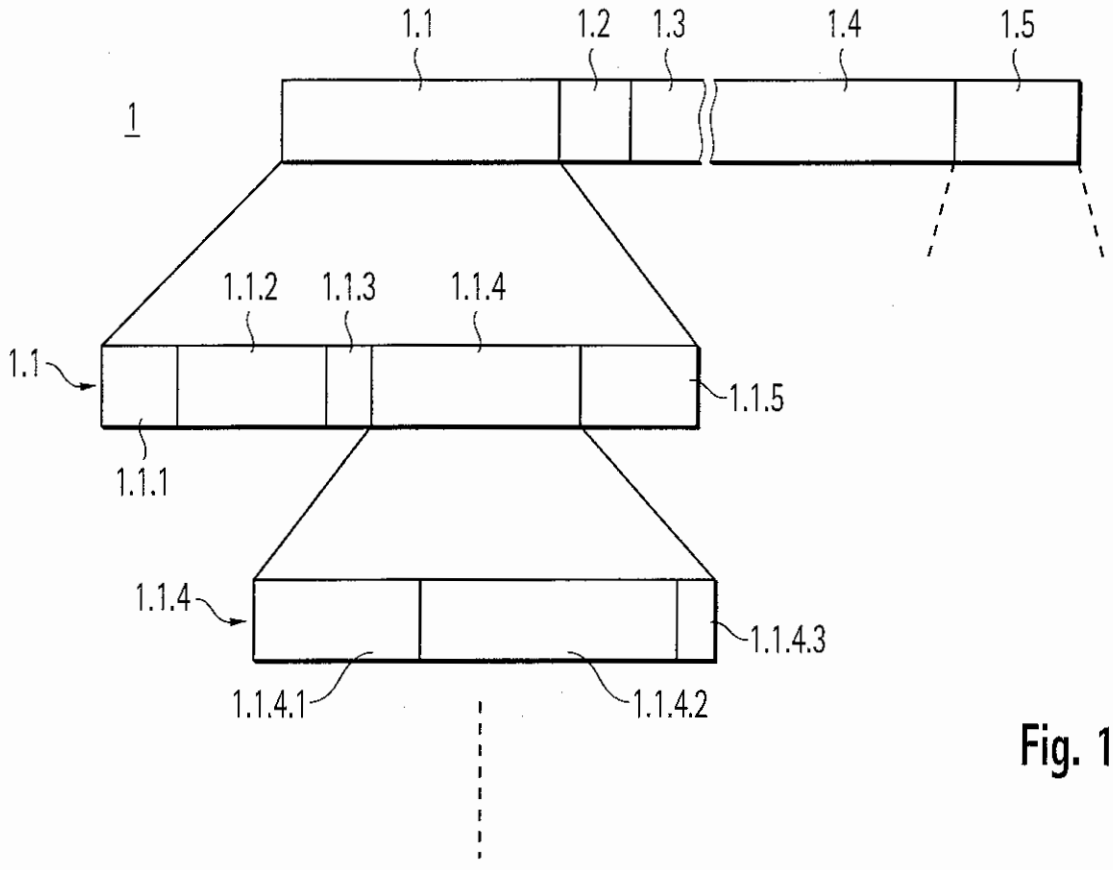

1.1
1.2
1.3
1.4
1.5
1
1.1.2
1.1.3
1.1.4
1.1
1.1.5
1.1.1
1.1.4
1.1.4.3
1.1.4.1
1.1.4.2

Fig. 1

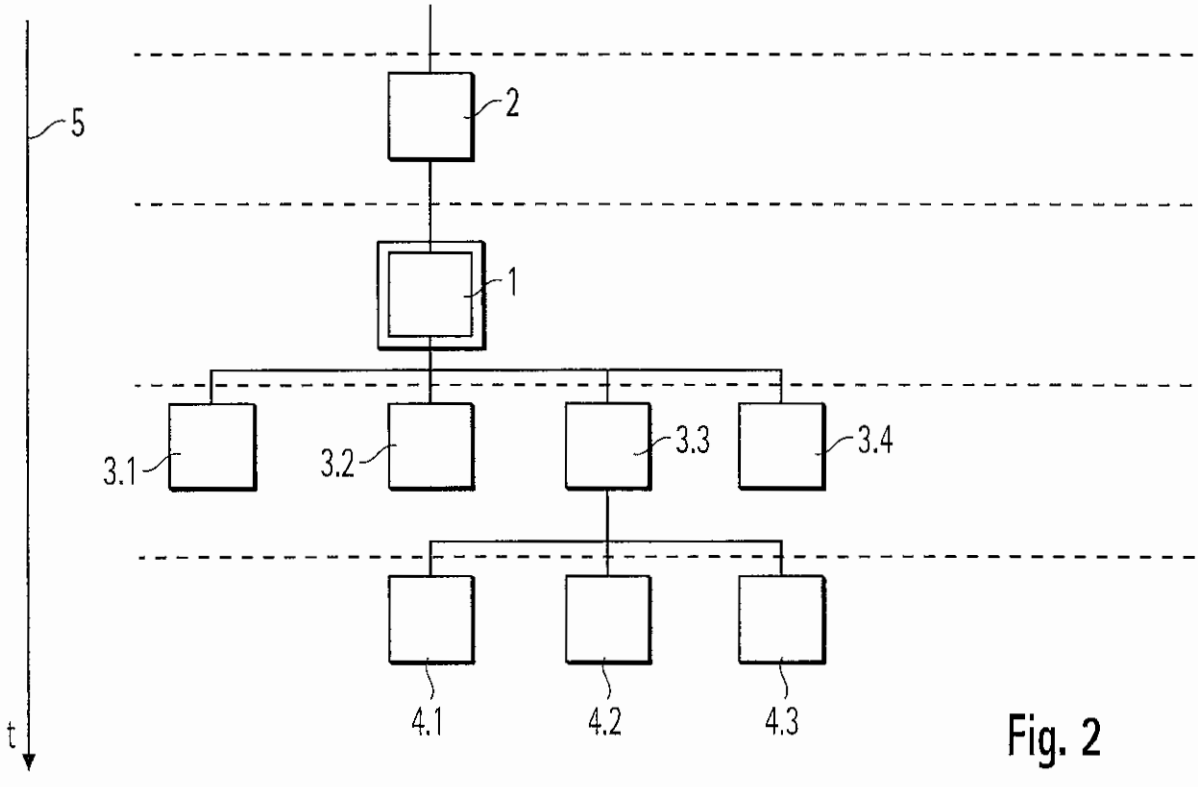
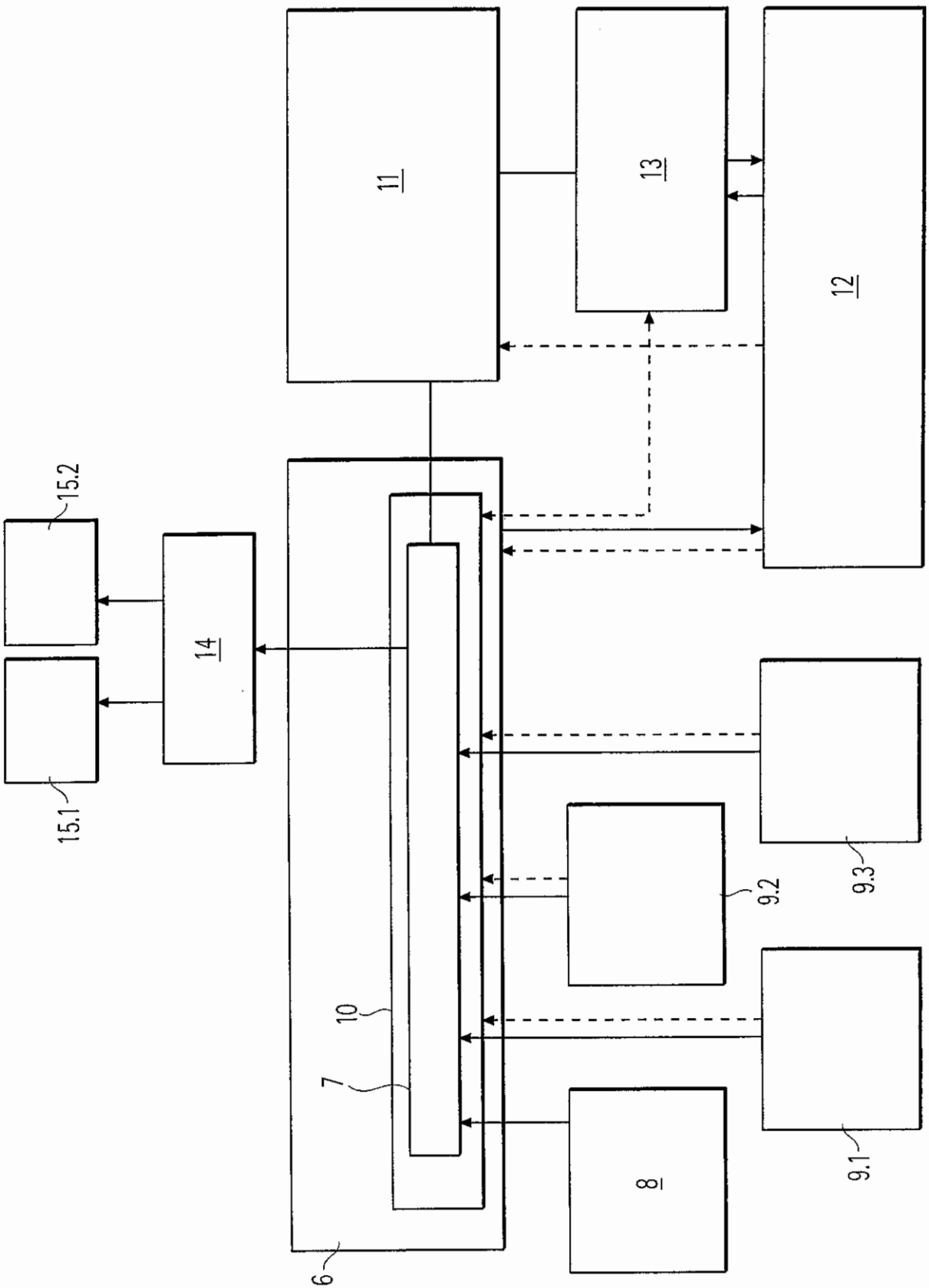

5
2
1
3.1
3.2
3.3
3.4
4.1
4.2
4.3
t

Fig. 2

Fig. 3



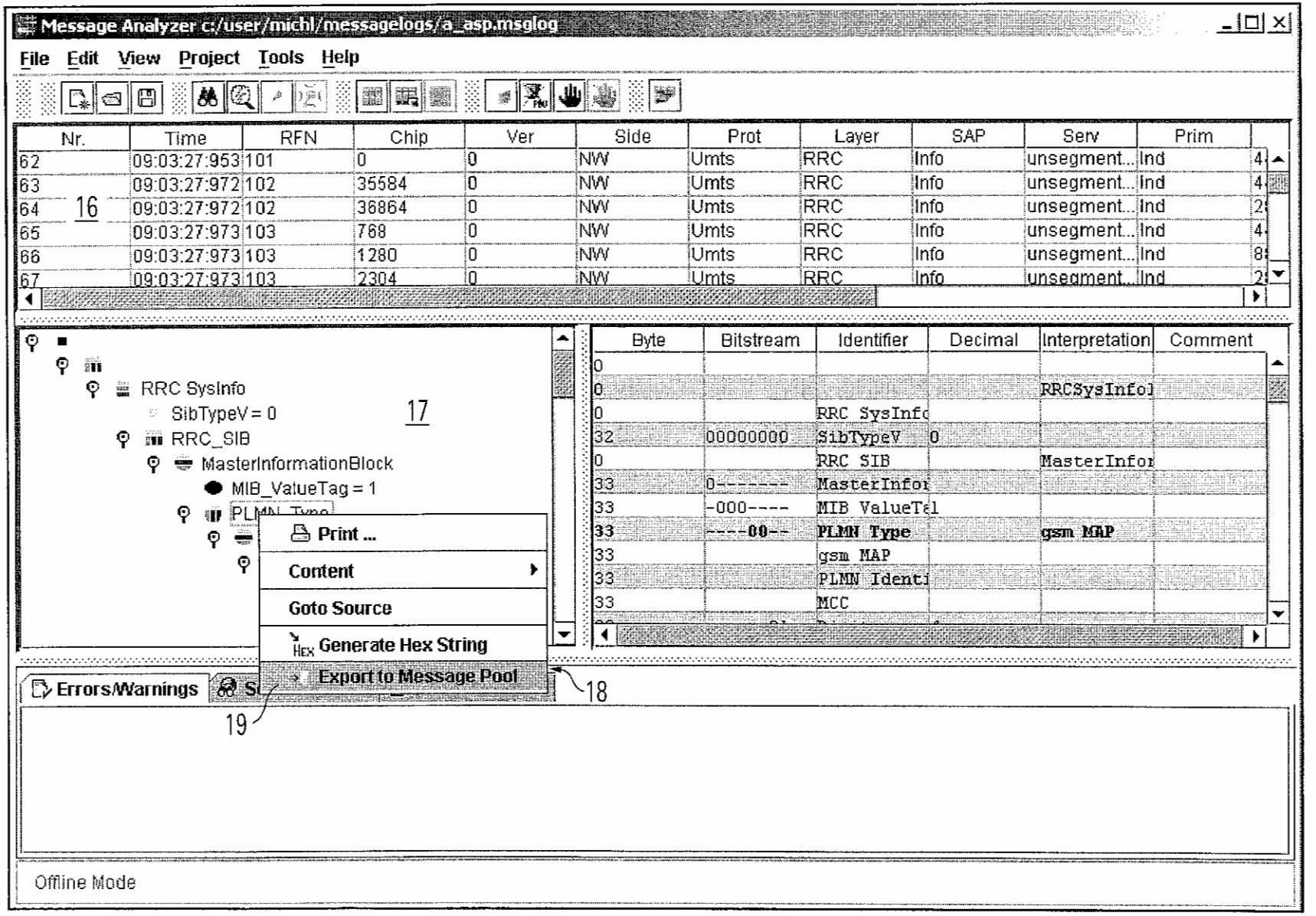

Message Analyzer c:/user/michl/messagelogs/a_asp.msglog
File Edit View Project Tools Help
Nr. Time RFN Chip Ver Side Prot Layer SAP Serv Prim
62 09:03:27:953 101 0 0 NW Umts RRC Info unsegment... Ind
63 09:03:27:972 102 35584 0 NW Umts RRC Info unsegment... Ind
64 09:03:27:972 102 36864 0 NW Umts RRC Info unsegment... Ind
65 09:03:27:973 103 768 0 NW Umts RRC Info unsegment... Ind
66 09:03:27:973 103 1280 0 NW Umts RRC Info unsegment... Ind
67 09:03:27:973 103 2304 0 NW Umts RRC Info unsegment... Ind
16
RRC SysInfo
SibTypeV = 0
17
RRC_SIB
MasterInformationBlock
MIB_ValueTag = 1
Print ...
Content
Goto Source
Generate Hex String
Export to Message Pool
18
19
Byte Bitstream Identifier Decimal Interpretation Comment
0
0 RRCSysInfo
0 RRC SysInfo
32 00000000 SibTypeV 0
0 RRC SIB MasterInfor
33 0------- MasterInfor
33 -000---- MIB ValueTa
33 ----00-- PLMN Type gsm MAP
33 gsm MAP
33 PLMN Identi
33 MCC
Errors/Warnings
Offline Mode

Fig. 4

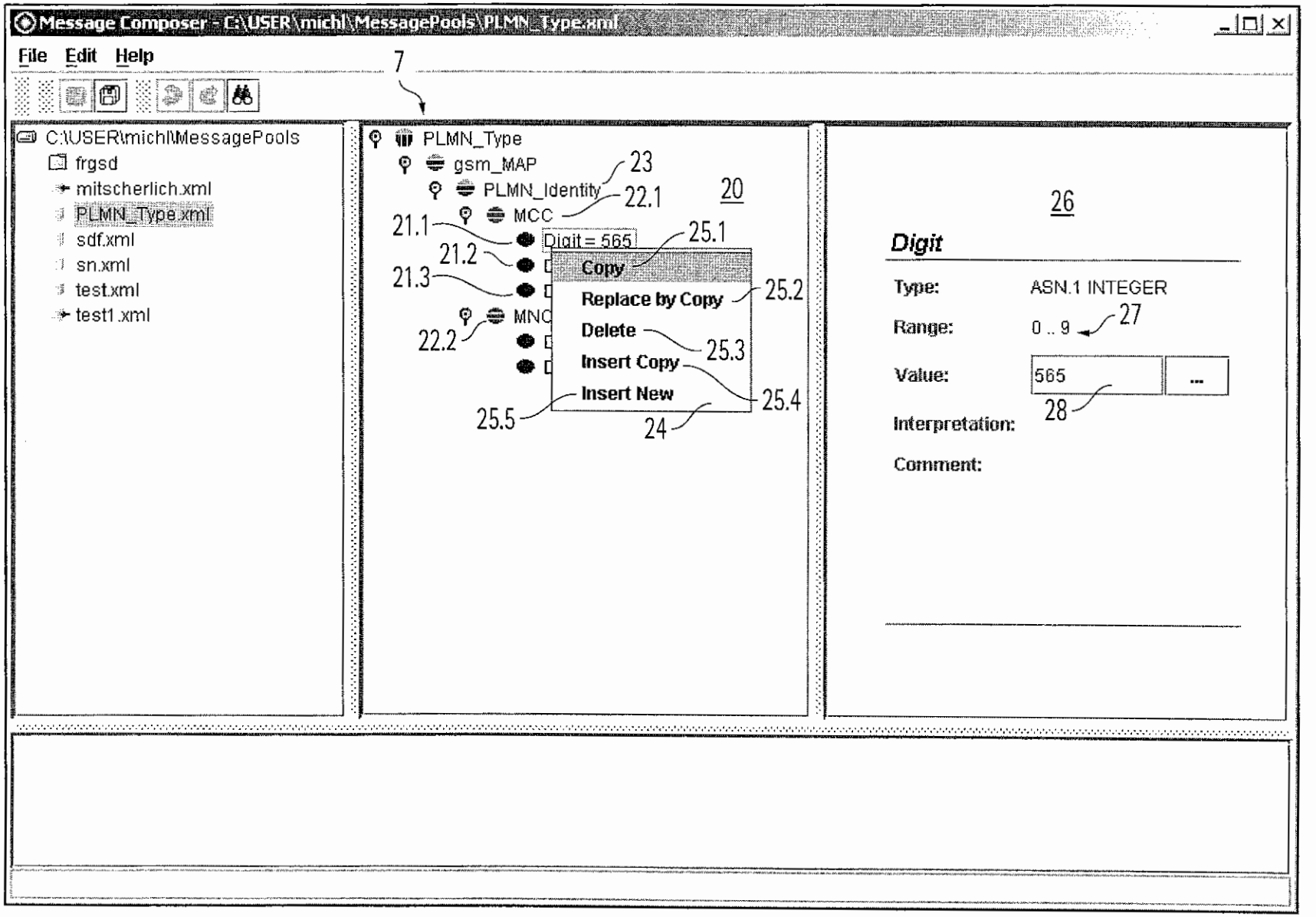

Message Composer - C:\USER\michl\MessagePools\PLMN_Type.xml
File Edit Help
7
C:\USER\michl\MessagePools
frgsd
mitscherlich.xml
PLMN_Type.xml
sdf.xml
sn.xml
test.xml
test1.xml
PLMN_Type
gsm_MAP
PLMN_Identity
MCC
MNC
23
22.1
20
21.1
21.2
21.3
22.2
Digit = 565
25.1
Copy
Replace by Copy
Delete
Insert Copy
Insert New
25.2
25.3
25.4
25.5
24
26
Digit
Type: ASN.1 INTEGER
Range: 0 .. 9
27
Value: 565
...
28
Interpretation:
Comment:

Fig. 5

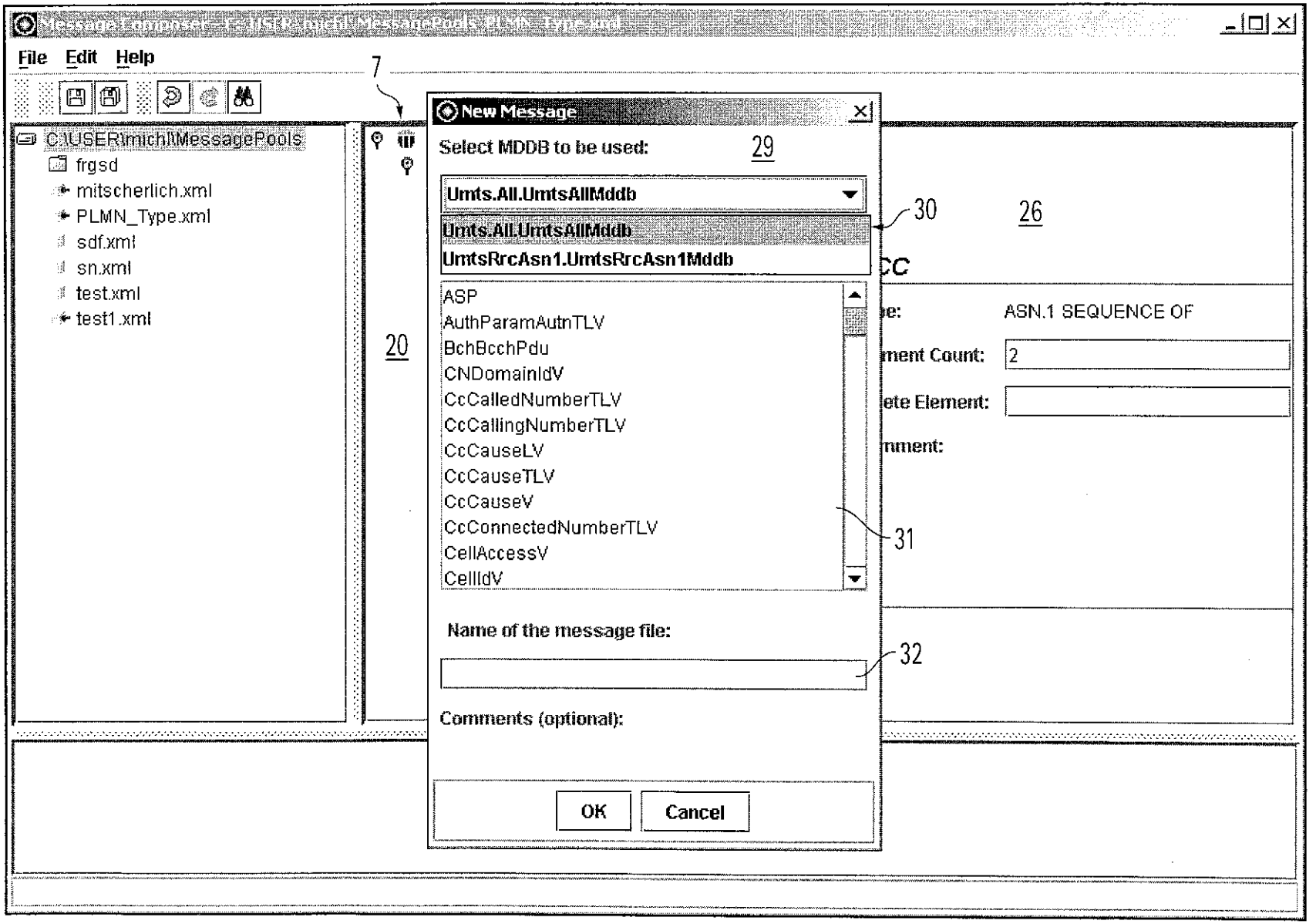

File
Edit
Help
7
C:\USER\michl\MessagePools
frgsd
mitscherlich.xml
PLMN_Type.xml
sdf.xml
sn.xml
test.xml
test1.xml
20
New Message
Select MDDB to be used:
29
Umts.All.UmtsAllMddb
30
26
Umts.All.UmtsAllMddb
UmtsRrcAsn1.UmtsRrcAsn1Mddb
ASP
AuthParamAutnTLV
BchBcchPdu
CNDomainIdV
CcCalledNumberTLV
CcCallingNumberTLV
CcCauseLV
CcCauseTLV
CcCauseV
CcConnectedNumberTLV
CellAccessV
CellIdV
31
Name of the message file:
32
Comments (optional):
OK
Cancel
ASN.1 SEQUENCE OF
2

Fig. 6

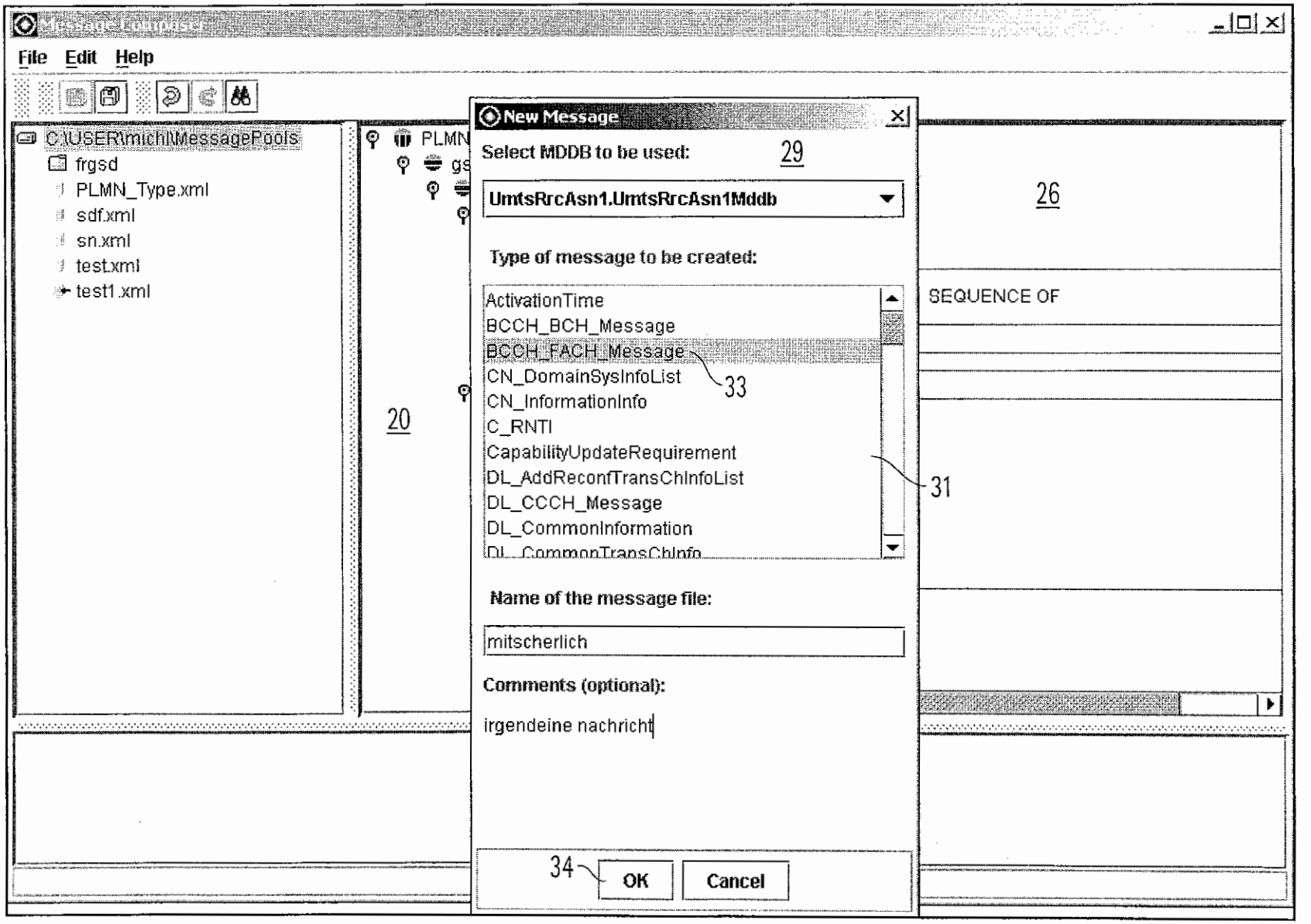

File Edit Help
C:\USER\michl\MessagePools
frgsd
PLMN_Type.xml
sdf.xml
sn.xml
test.xml
test1.xml
20
New Message
Select MDDB to be used:
29
UmtsRrcAsn1.UmtsRrcAsn1Mddb
Type of message to be created:
ActivationTime
BCCH_BCH_Message
BCCH_FACH_Message
CN_DomainSysInfoList
CN_InformationInfo
C_RNTI
CapabilityUpdateRequirement
DL_AddReconfTransChInfoList
DL_CCCH_Message
DL_CommonInformation
33
31
Name of the message file:
mitscherlich
Comments (optional):
irgendeine nachricht
34
OK
Cancel
26
SEQUENCE OF

Fig. 7

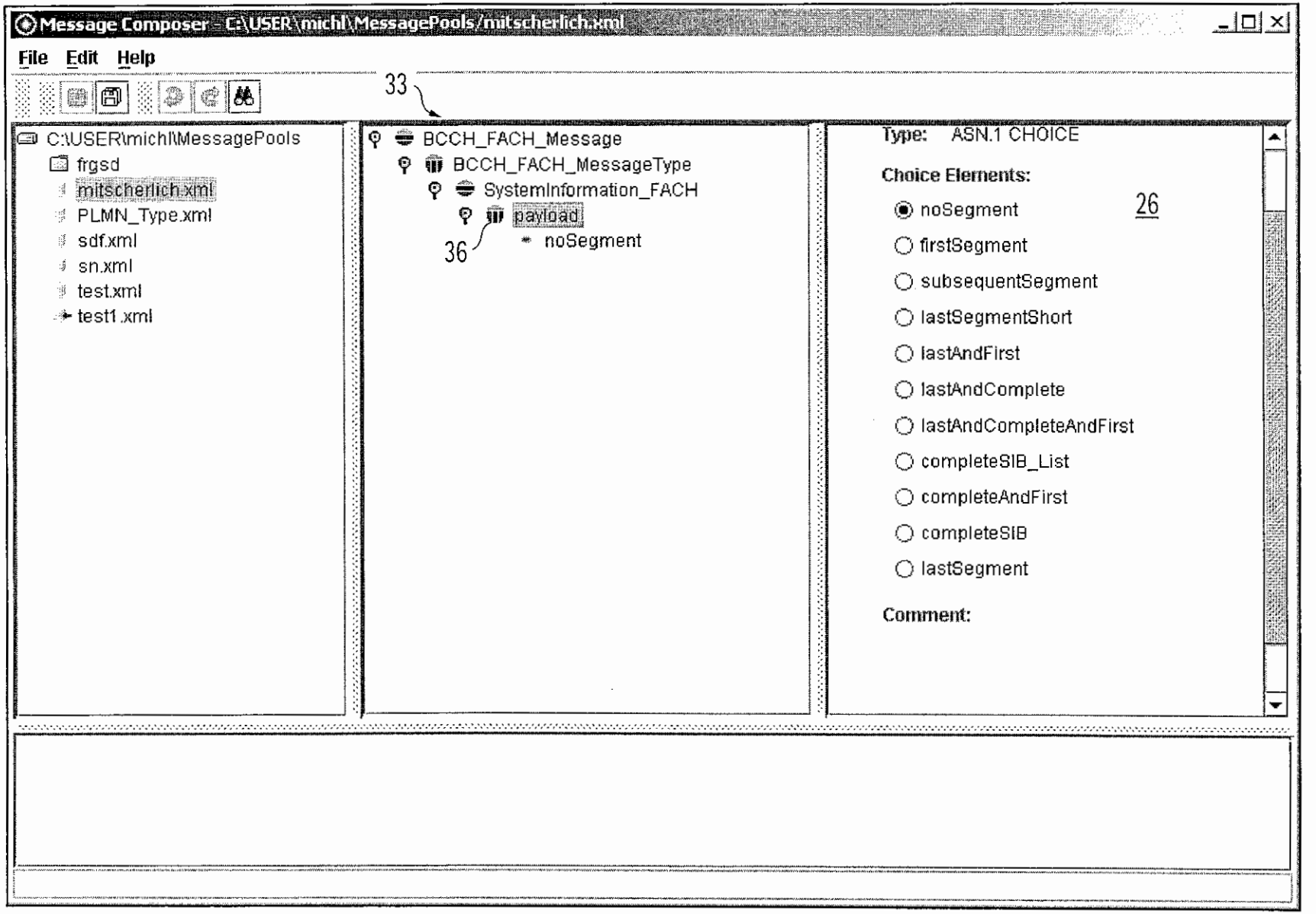

Message Composer - C:\USER\michl\MessagePools/mitscherlich.xml
File Edit Help
33
C:\USER\michl\MessagePools
frgsd
mitscherlich.xml
PLMN_Type.xml
sdf.xml
sn.xml
test.xml
test1.xml
BCCH_FACH_Message
BCCH_FACH_MessageType
SystemInformation_FACH
payload
36
noSegment
Type: ASN.1 CHOICE
Choice Elements:
26
noSegment
firstSegment
subsequentSegment
lastSegmentShort
lastAndFirst
lastAndComplete
lastAndCompleteAndFirst
completeSIB_List
completeAndFirst
completeSIB
lastSegment
Comment:

Fig. 8

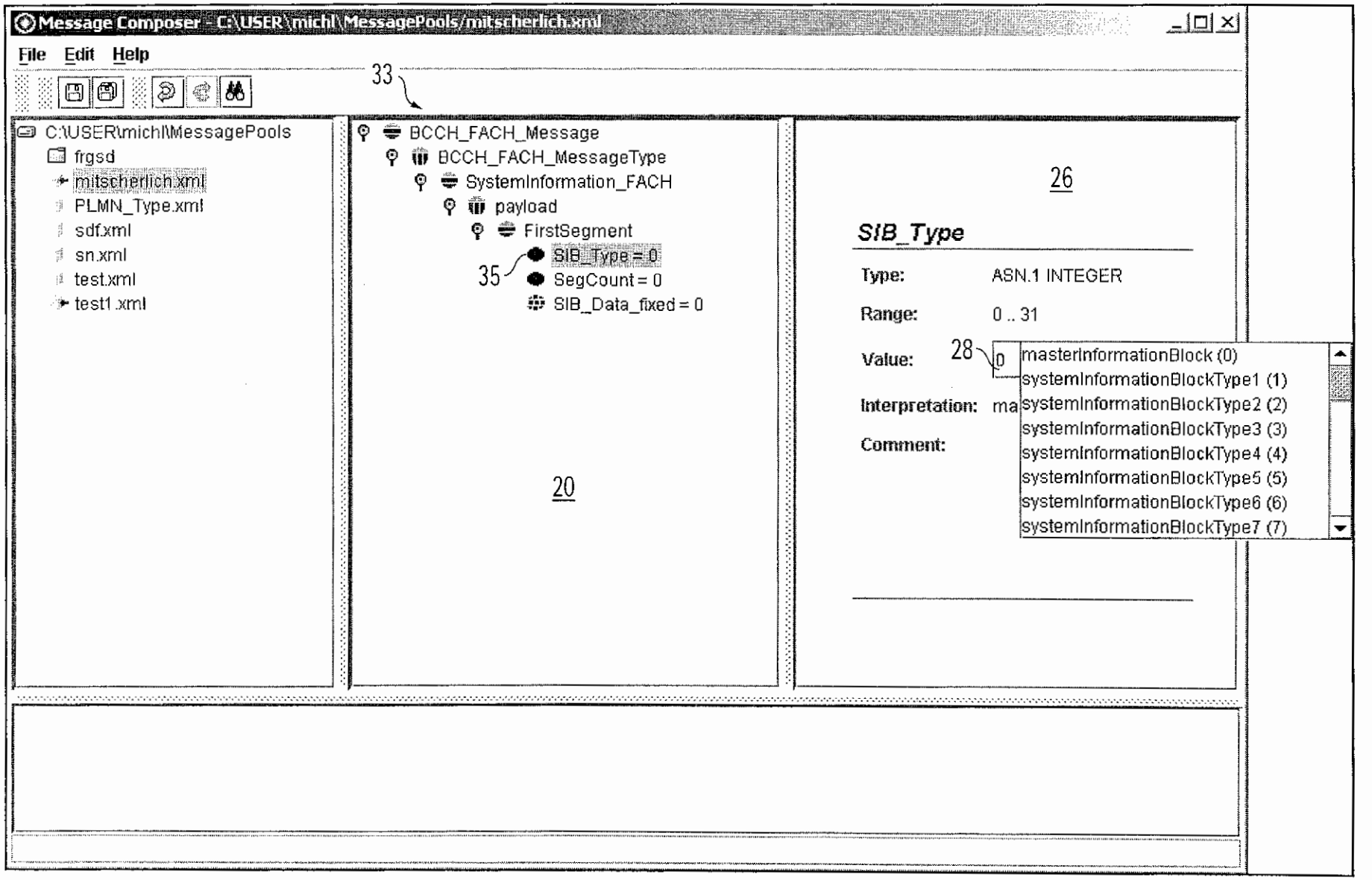

Message Composer - C:\USER\michl\MessagePools/mitscherlich.xml
File
Edit
Help
33
C:\USER\michl\MessagePools
frgsd
mitscherlich.xml
PLMN_Type.xml
sdf.xml
sn.xml
test.xml
test1.xml
BCCH_FACH_Message
BCCH_FACH_MessageType
SystemInformation_FACH
payload
FirstSegment
35
SIB_Type = 0
SegCount = 0
SIB_Data_fixed = 0
20
26
SIB_Type
Type:
ASN.1 INTEGER
Range:
0 .. 31
Value:
28
0
Interpretation:
ma
Comment:
masterInformationBlock (0)
systemInformationBlockType1 (1)
systemInformationBlockType2 (2)
systemInformationBlockType3 (3)
systemInformationBlockType4 (4)
systemInformationBlockType5 (5)
systemInformationBlockType6 (6)
systemInformationBlockType7 (7)

Fig. 9

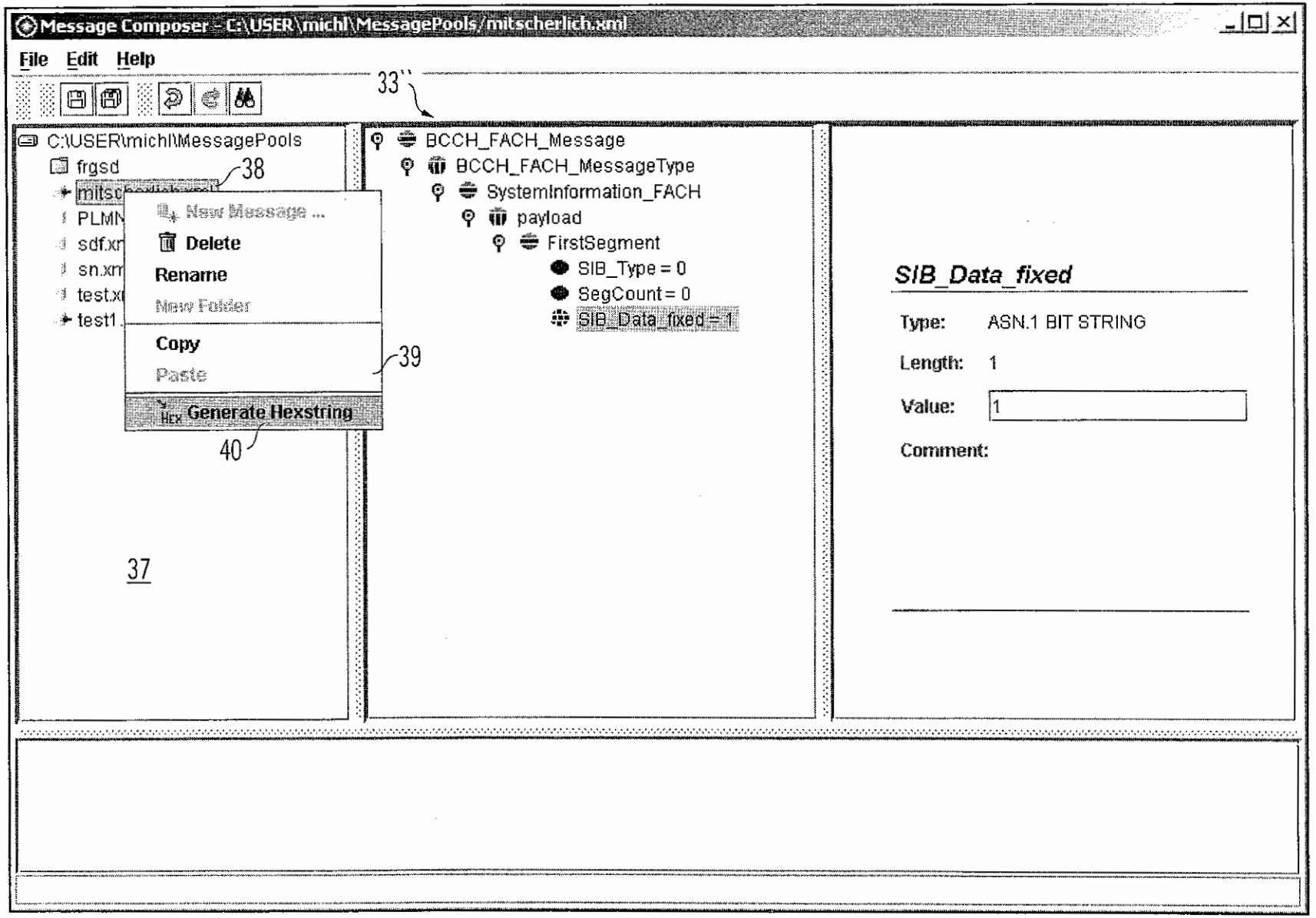

Message Composer - C:\USER\michl\MessagePools/mitscherlich.xml
File Edit Help
33''
C:\USER\michl\MessagePools
frgsd
38
PLMN
sdf.xm
sn.xm
test.xm
test1
New Message ...
Delete
Rename
New Folder
Copy
Paste
39
Hex Generate Hexstring
40
37
BCCH_FACH_Message
BCCH_FACH_MessageType
SystemInformation_FACH
payload
FirstSegment
SIB_Type = 0
SegCount = 0
SIB_Data_fixed = 1
SIB_Data_fixed
Type: ASN.1 BIT STRING
Length: 1
Value: 1
Comment:

Fig. 10

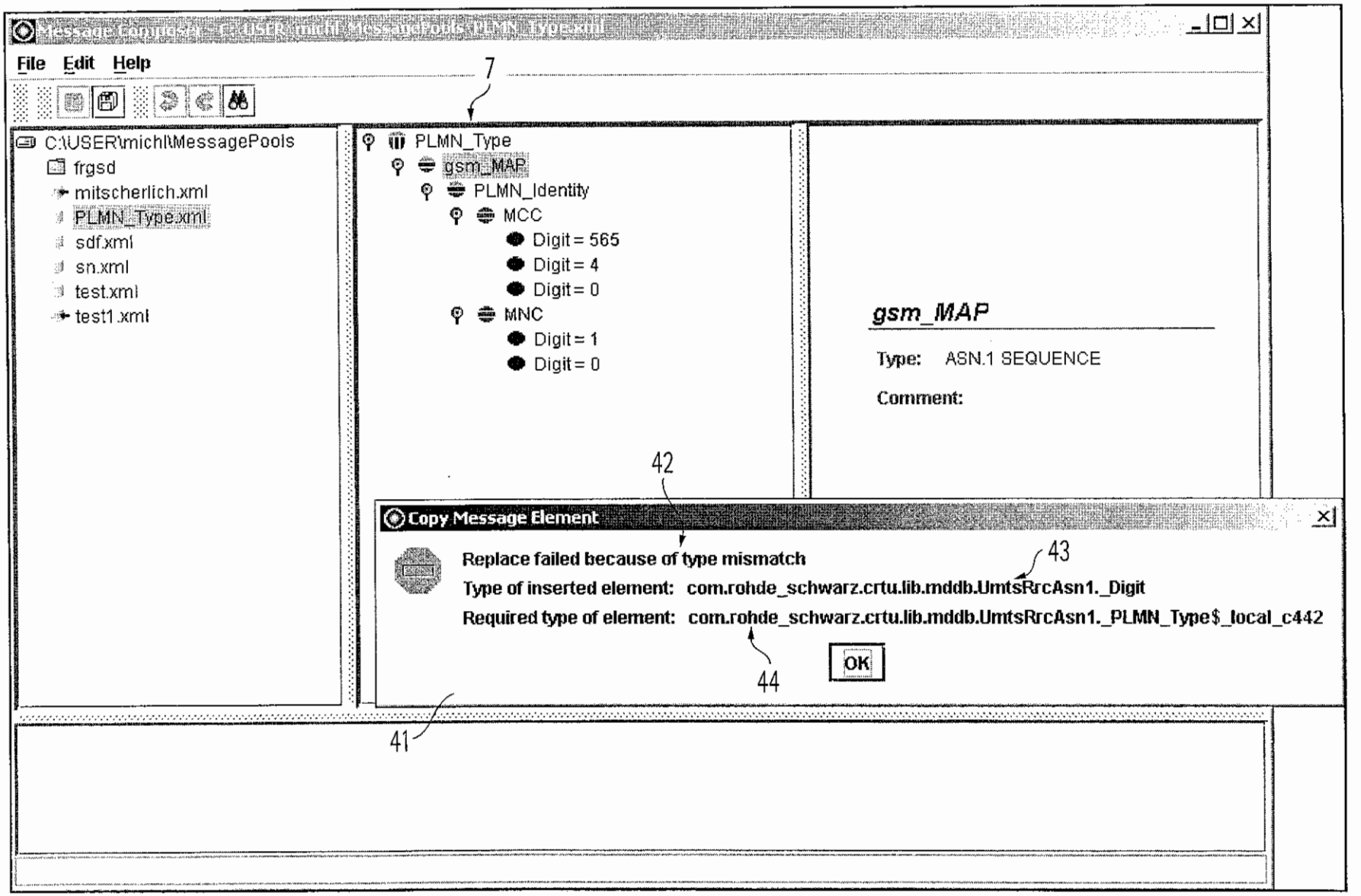

File Edit Help
7
C:\USER\michl\MessagePools
frgsd
mitscherlich.xml
PLMN_Type.xml
sdf.xml
sn.xml
test.xml
test1.xml
PLMN_Type
gsm_MAP
PLMN_Identity
MCC
Digit = 565
Digit = 4
Digit = 0
MNC
Digit = 1
Digit = 0
gsm_MAP
Type: ASN.1 SEQUENCE
Comment:
42
Copy Message Element
Replace failed because of type mismatch
43
Type of inserted element: com.rohde_schwarz.crtu.lib.mddb.UmtsRrcAsn1._Digit
Required type of element: com.rohde_schwarz.crtu.lib.mddb.UmtsRrcAsn1._PLMN_Type$_local_c442
44
OK
41

Fig. 11

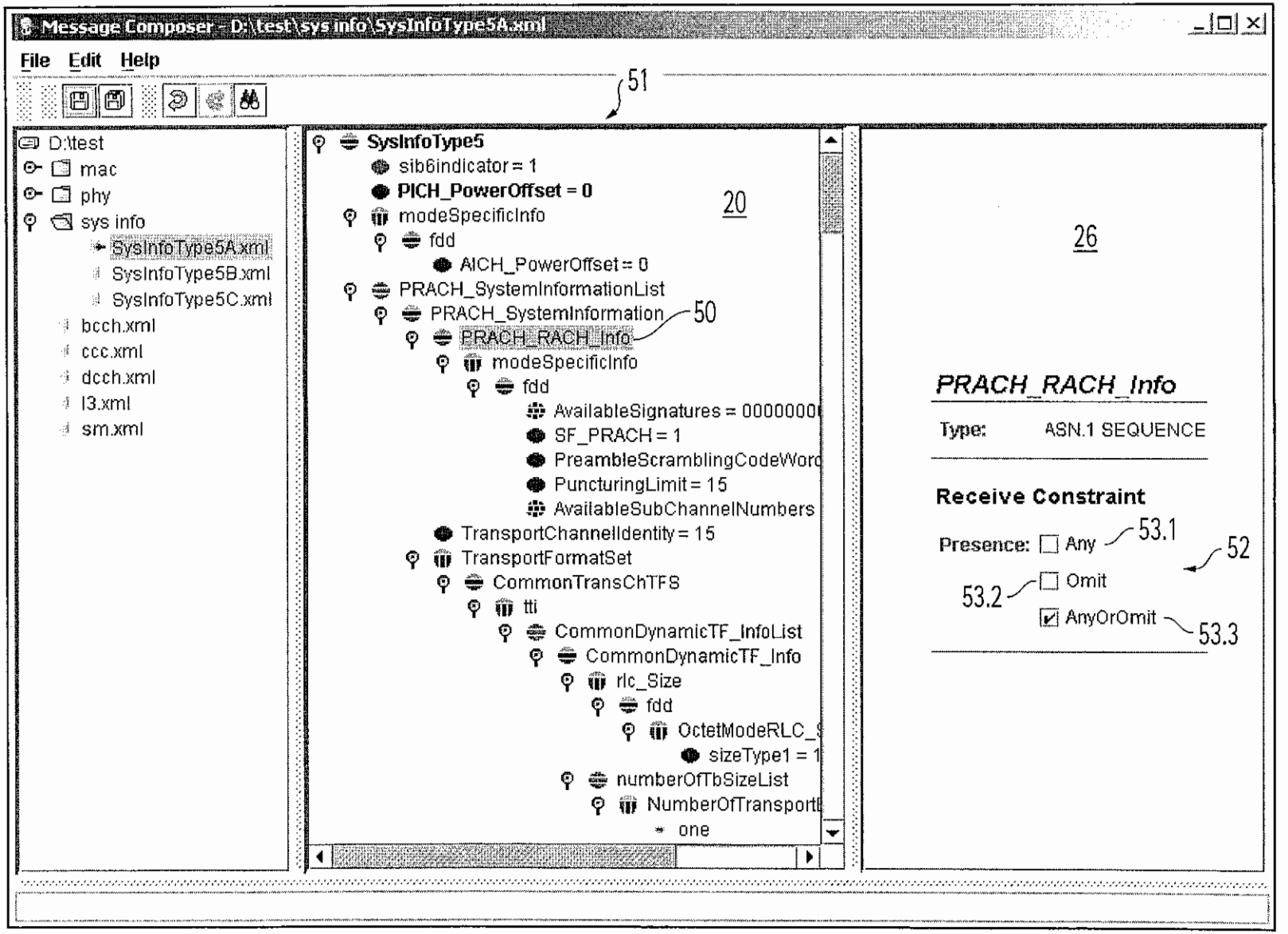

Message Composer - D:\test\sys info\SysInfoType5A.xml
File Edit Help
51
D:\test
mac
phy
sys info
SysInfoType5A.xml
SysInfoType5B.xml
SysInfoType5C.xml
bcch.xml
ccc.xml
dcch.xml
l3.xml
sm.xml
SysInfoType5
sib6indicator = 1
PICH_PowerOffset = 0
20
modeSpecificInfo
fdd
AICH_PowerOffset = 0
PRACH_SystemInformationList
PRACH_SystemInformation
50
PRACH_RACH_Info
modeSpecificInfo
fdd
AvailableSignatures = 0000000
SF_PRACH = 1
PreambleScramblingCodeWord
PuncturingLimit = 15
AvailableSubChannelNumbers
TransportChannelIdentity = 15
TransportFormatSet
CommonTransChTFS
tti
CommonDynamicTF_InfoList
CommonDynamicTF_Info
rlc_Size
fdd
OctetModeRLC_
sizeType1 = 1
numberOfTbSizeList
NumberOfTransportB
one
26
PRACH_RACH_Info
Type: ASN.1 SEQUENCE
Receive Constraint
Presence:
Any
53.1
52
Omit
53.2
AnyOrOmit
53.3

Fig. 12

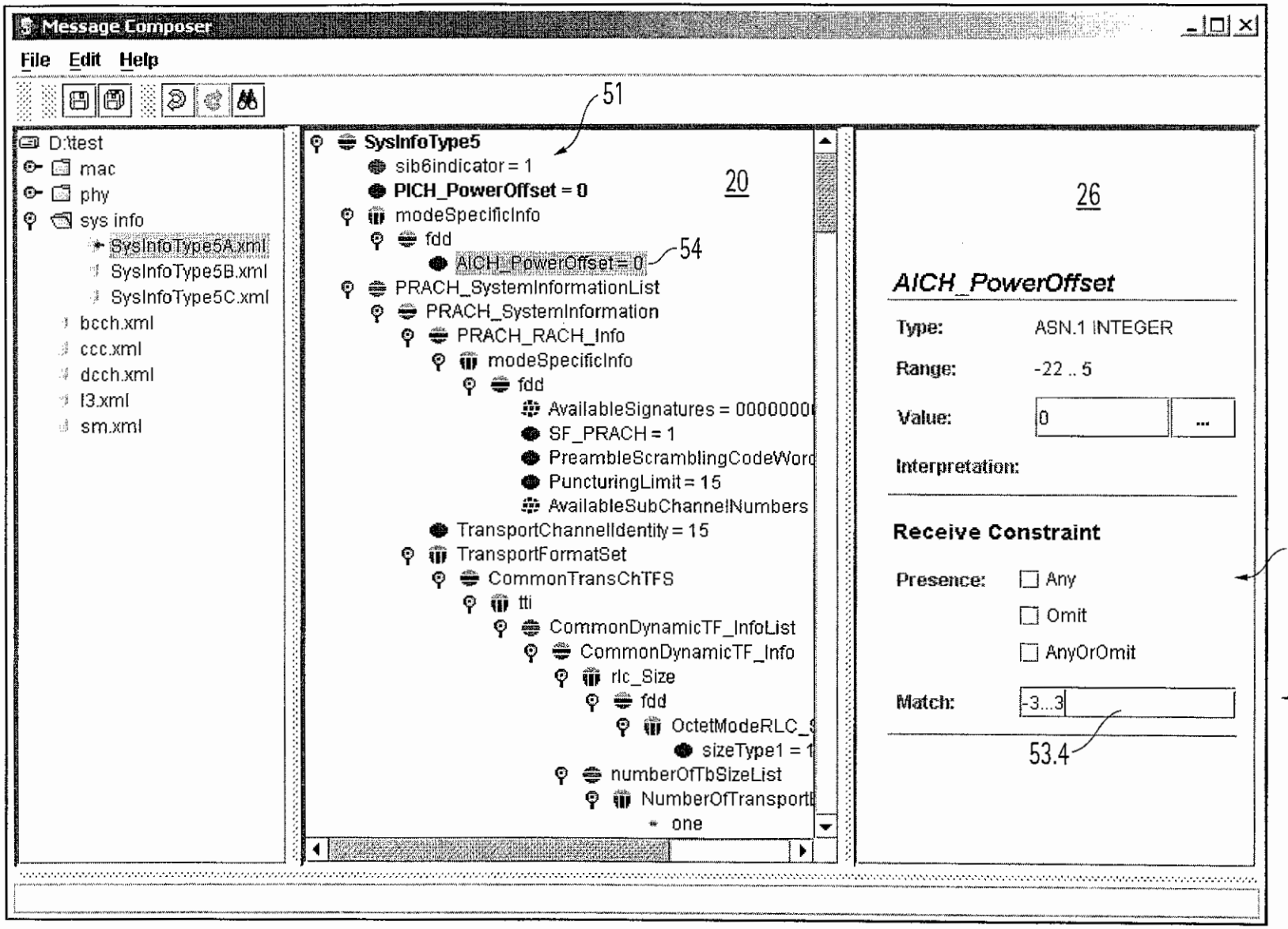

Message Composer
File Edit Help
D:\test
mac
phy
sys info
SysInfoType5A.xml
SysInfoType5B.xml
SysInfoType5C.xml
bcch.xml
ccc.xml
dcch.xml
l3.xml
sm.xml
51
SysInfoType5
sib6indicator = 1
PICH_PowerOffset = 0
20
modeSpecificInfo
fdd
AICH_PowerOffset = 0
54
PRACH_SystemInformationList
PRACH_SystemInformation
PRACH_RACH_Info
modeSpecificInfo
fdd
AvailableSignatures = 0000000
SF_PRACH = 1
PreambleScramblingCodeWord
PuncturingLimit = 15
AvailableSubChannelNumbers
TransportChannelIdentity = 15
TransportFormatSet
CommonTransChTFS
tti
CommonDynamicTF_InfoList
CommonDynamicTF_Info
rlc_Size
fdd
OctetModeRLC_
sizeType1 = 1
numberOfTbSizeList
NumberOfTransportB
one
26
AICH_PowerOffset
Type: ASN.1 INTEGER
Range: -22 .. 5
Value: 0
Interpretation:
Receive Constraint
52'
Presence: Any
Omit
AnyOrOmit
55
Match: -3...3
53.4

Fig. 13