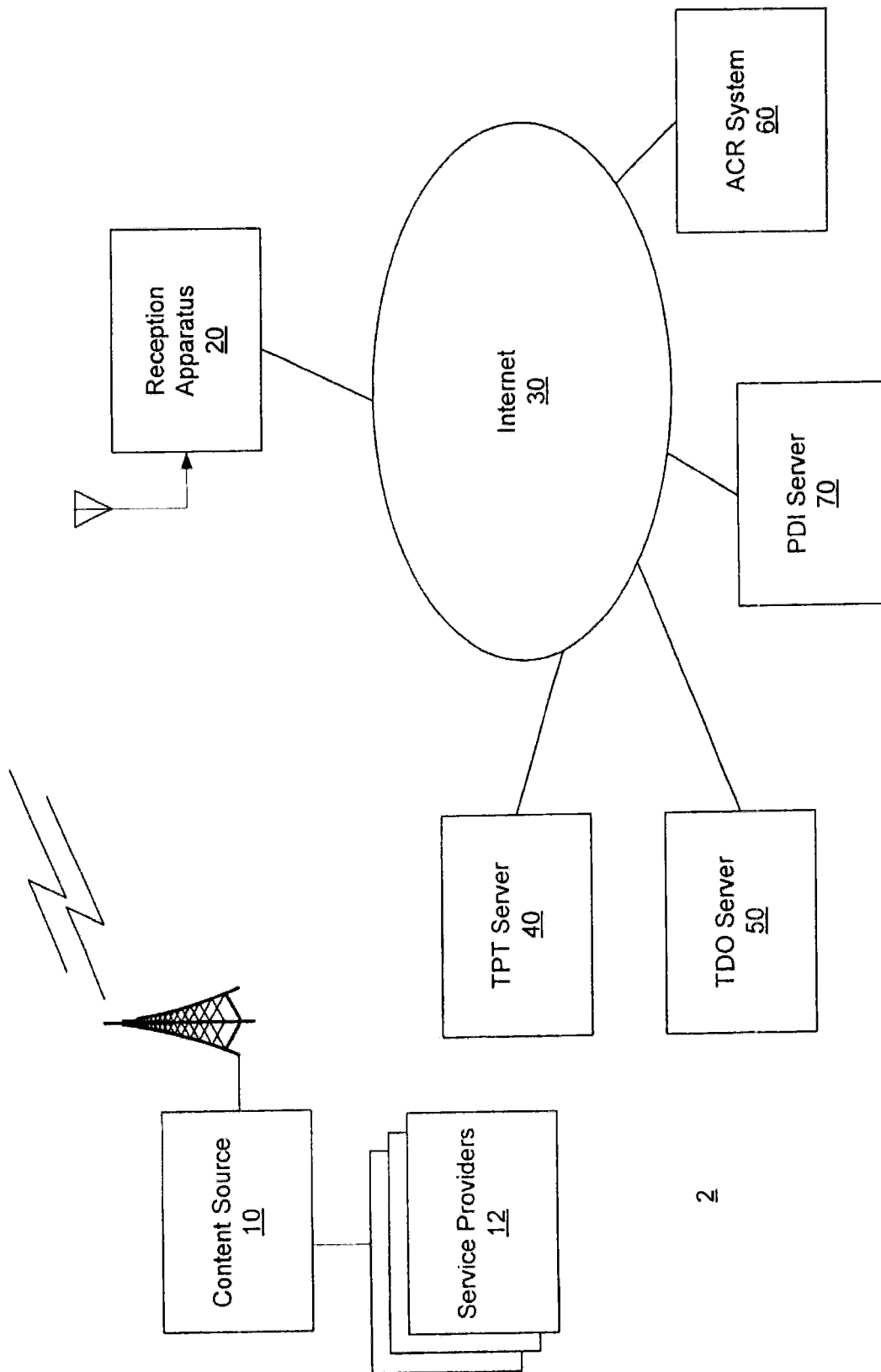




2

FIG. 1

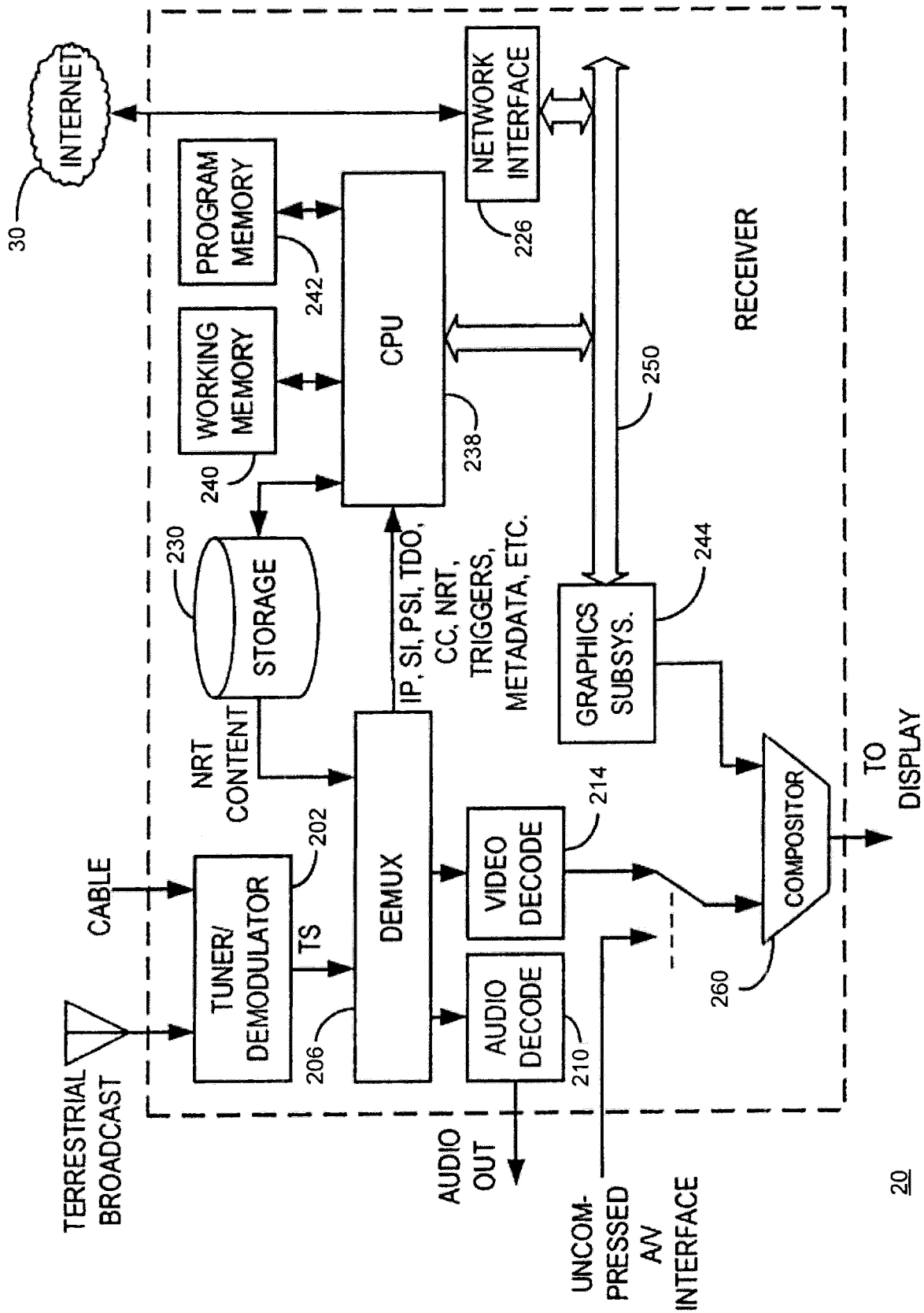
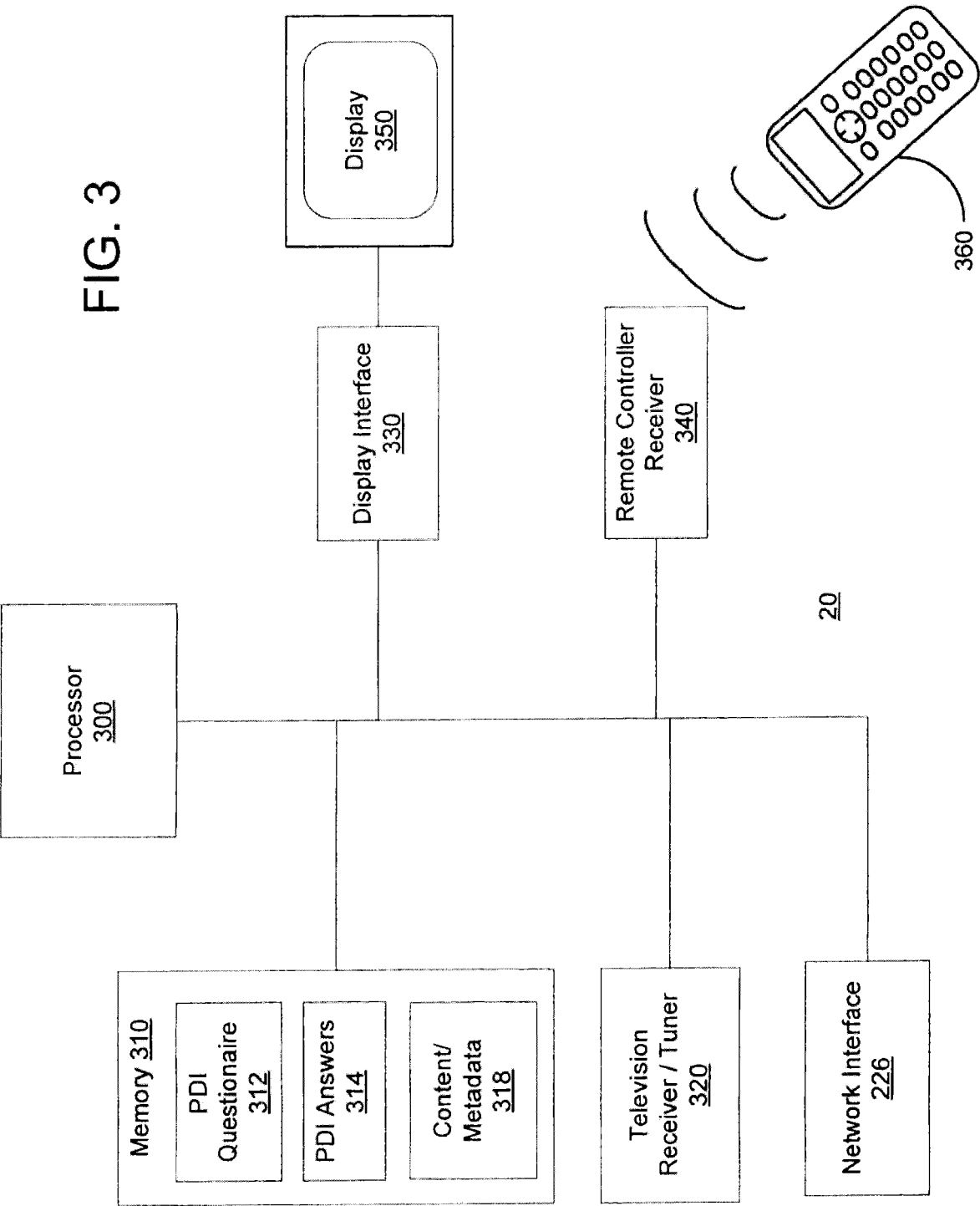


FIG. 2



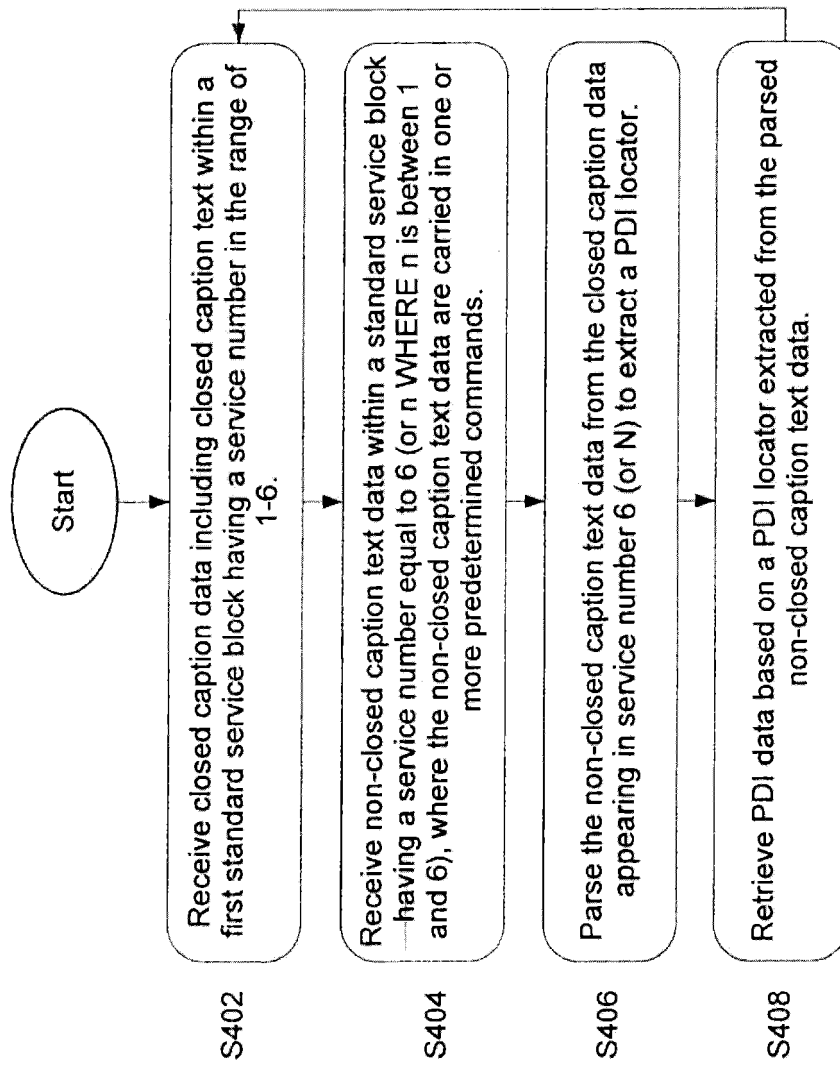


FIG. 4

5/15

b ₇	b ₆	b ₅	b ₄	b ₃	b ₂	b ₁	b ₀	
0	0	0	1	0	0	0	0	EXT1
1	0	0	1	1	0	0	0	0x98
1	1	0	L ₄	L ₃	L ₂	L ₁	L ₀	
PDI_locator()								(variable length)

FIG. 5A

	No. of bits	Format	No. of Bytes
PDI_locator() {			
reserved	4	bslbf	1
PDI_locator_type	4	uimsbf	
for (i=0; k<L-1; k++) {			
PDI_locator_character	8	uimsbf	1
}			
}			

FIG. 5B

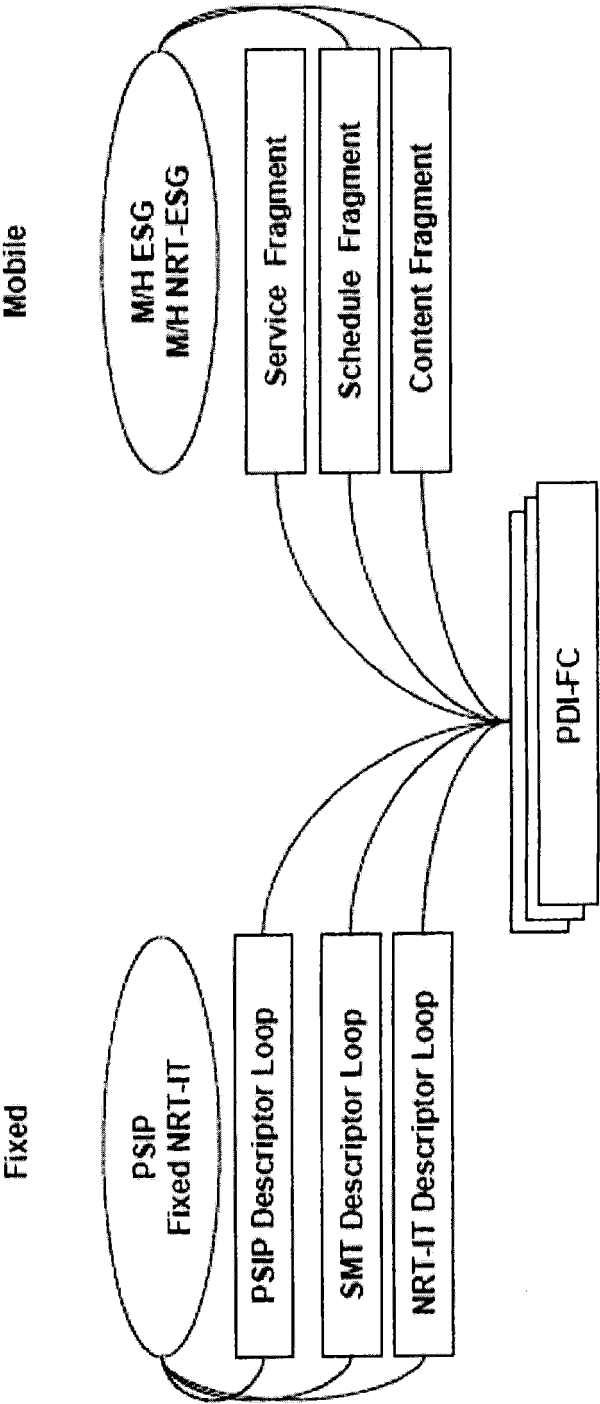


FIG. 6

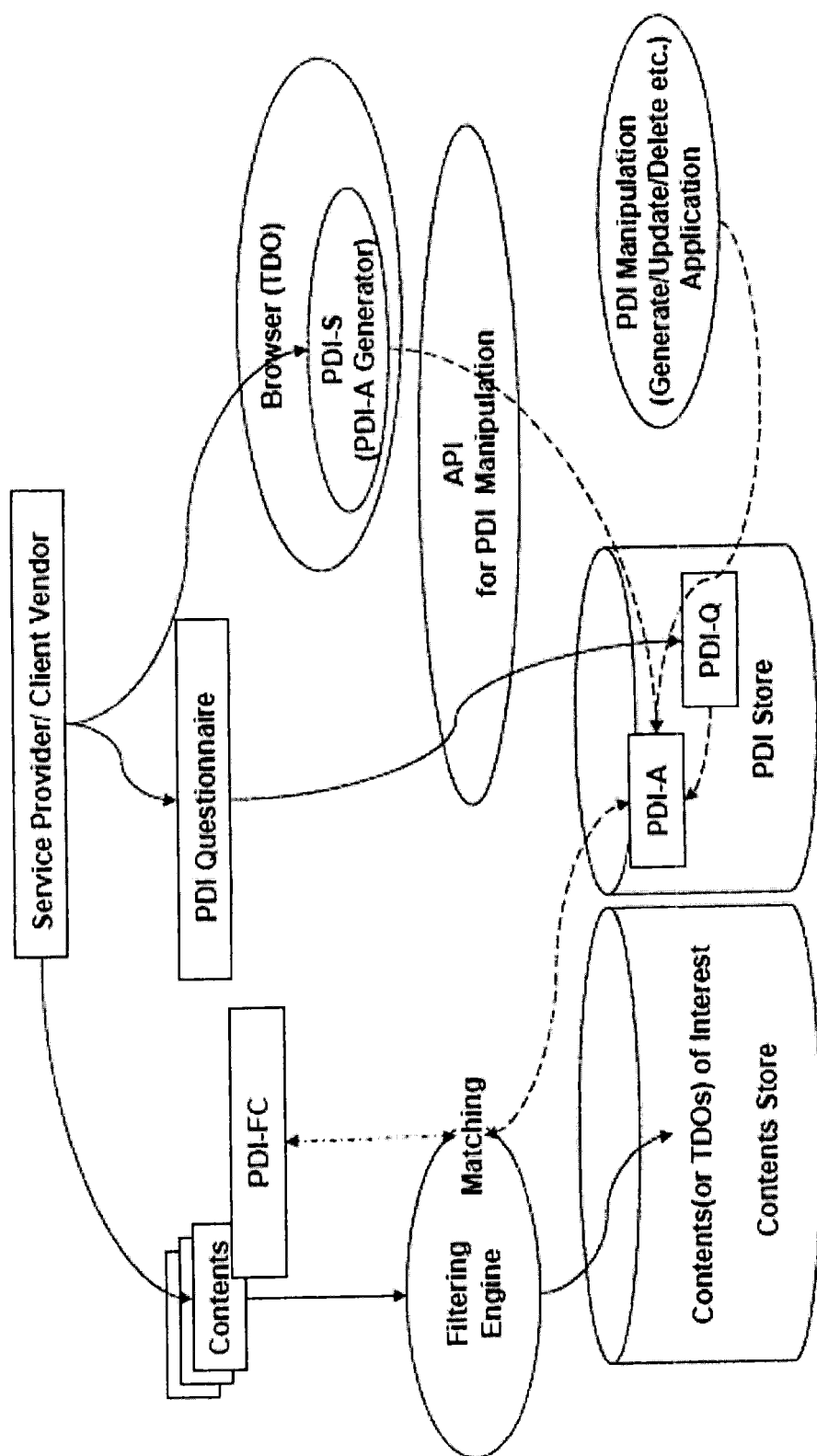


FIG. 7A

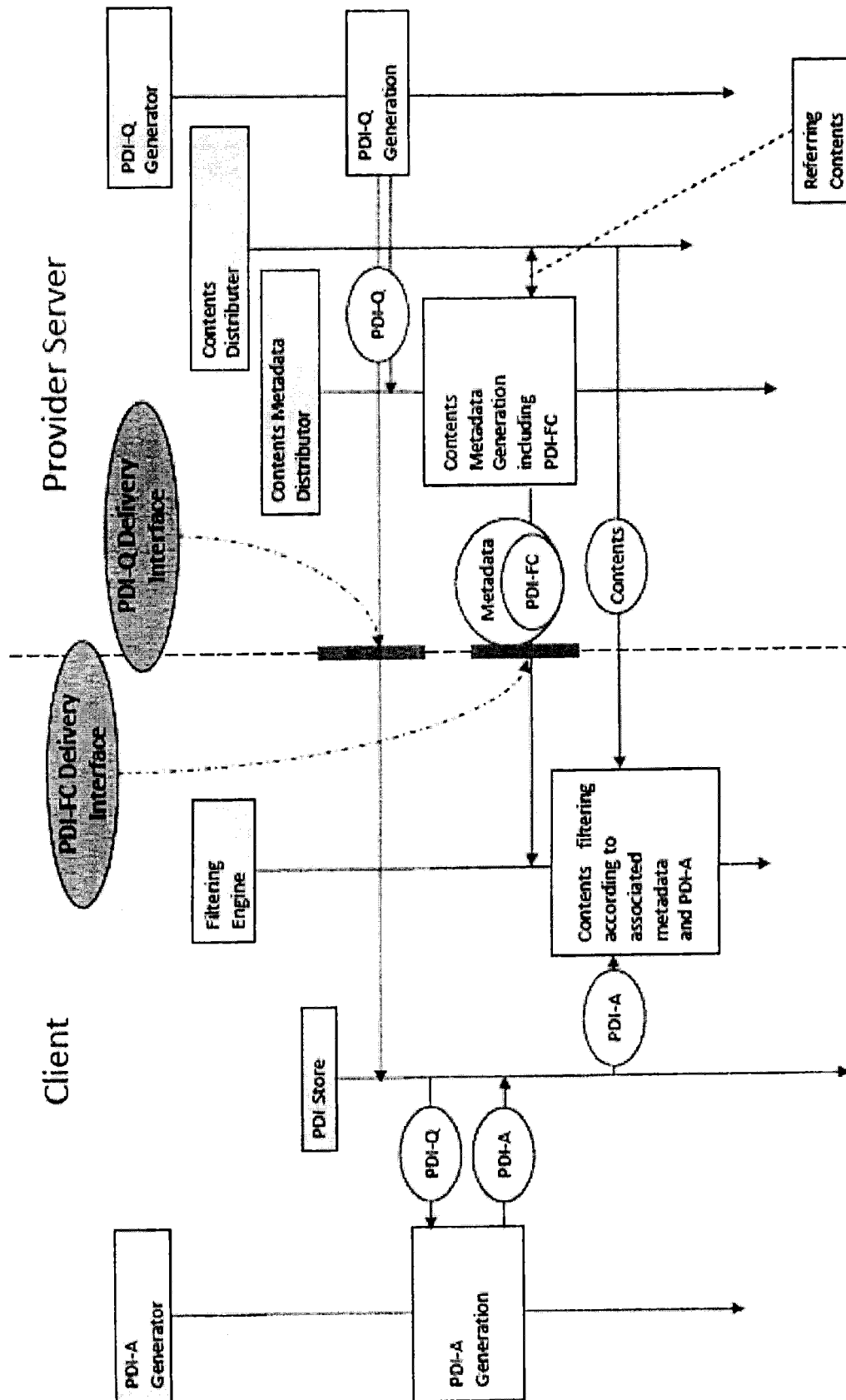


FIG. 7B

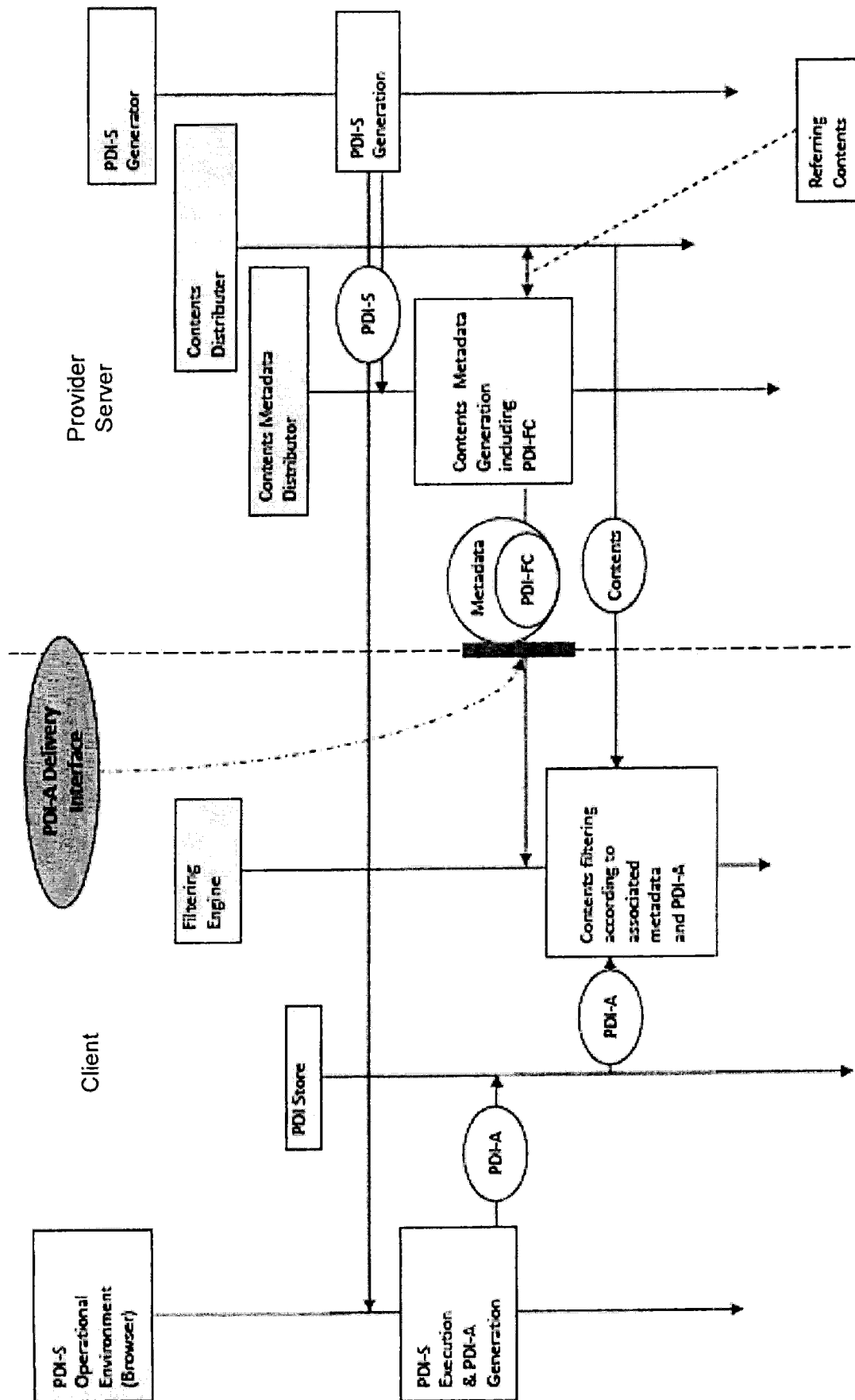


FIG. 7C

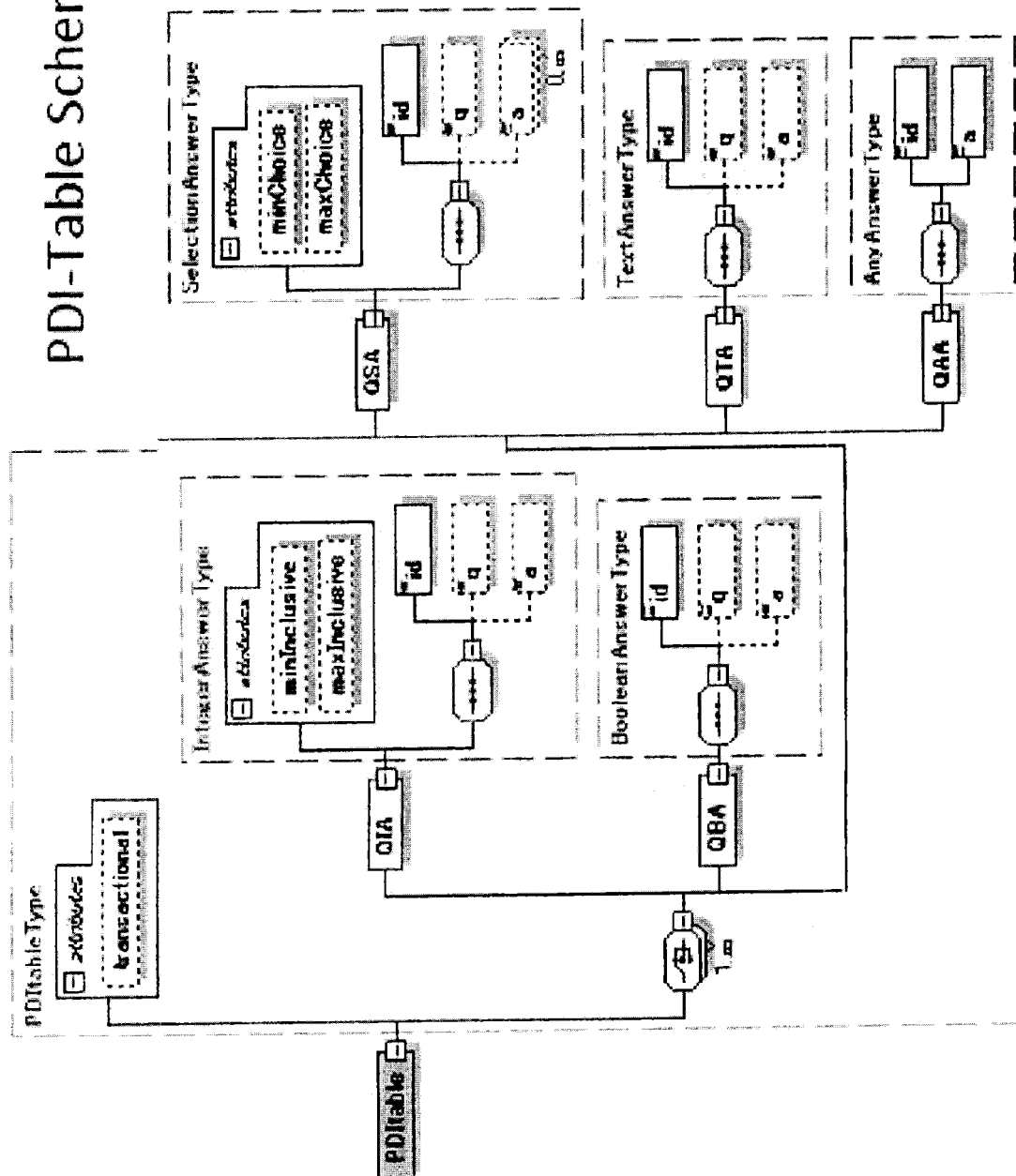
```

<PDitable
  <QBA> <----- QUESTION EXPECTING BOOLEAN TYPE ANSWER, YES OR NO
    <id>111</id>
    <q>Are you currently employed?</q>
  </QBA>
  <QIA minInclusive="10" maxInclusive="100"> <----- QUESTION EXPECTING VARIABLE INTEGER TYPE ANSWER
    <id>222</id>
    <q>What is the age of the oldest member of the household who watches television?</q>
  </QIA>
  <QSA minChoice="1" maxChoice="3"> <----- QUESTION EXPECTING MULTIPLE SELECTION TYPE ANSWER
    <id>123</id>
    <q>In which of the following sports are you most interested? (Multiple selection allowed)</q>
    <a>Baseball</a>
    <a>Basketball</a>
    <a>Soccer</a>
    <a>Hockey</a>
  </QSA>
  <QSA minChoice="1"> <----- QUESTION EXPECTING SINGLE SELECTION TYPE ANSWER
    <id>ProgramX:123</id>
    <q>Do you enjoy camping and outdoor recreation? (Only one selection)</q>
    <a>Never</a>
    <a>Occasionally</a>
    <a>Frequently</a>
  </QSA>
  <QTA> <----- QUESTION EXPECTING VARIABLE TEXT TYPE ANSWER
    <id>321</id>
    <q>Do you have any idea to make ATSC2.0 services much more attractive?</q>
  </QTA>
</PDitable>

```

FIG. 8

PDI-Table Schema



```

<xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema" elementFormDefault="qualified"
  attributeFormDefault="unqualified">
  <xs:complexType name="PDitable" type="PDitableType"/>
  <xs:complexType name="PDitableType">
    <xs:choice maxOccurs="unbounded">
      <xs:element name="QIA" type="IntegerAnswerType"/>
      <xs:element name="QBA" type="BooleanAnswerType"/>
      <xs:element name="QSA" type="SelectionAnswerType"/>
      <xs:element name="QTA" type="TextAnswerType"/>
      <xs:element name="QAA" type="AnyAnswerType"/>
    </xs:choice>
    <xs:attribute name="transactional" type="xs:boolean" use="optional"/>
  </xs:complexType>
  <xs:complexType name="IntegerAnswerType">
    <xs:sequence>
      <xs:element name="id" type="xs:anyURI"/>
      <xs:element name="q" type="xs:string" minOccurs="0"/>
      <xs:element name="a" type="xs:integer" minOccurs="0"/>
    </xs:sequence>
    <xs:attribute name="minInclusive" type="xs:integer" use="optional"/>
    <xs:attribute name="maxInclusive" type="xs:integer" use="optional"/>
  </xs:complexType>
  <xs:complexType name="BooleanAnswerType">
    <xs:sequence>
      <xs:element name="id" type="xs:anyURI"/>
      <xs:element name="q" type="xs:string" minOccurs="0"/>
      <xs:element name="a" type="xs:boolean" minOccurs="0"/>
    </xs:sequence>
  </xs:complexType>
  <xs:complexType name="TextAnswerType">
    <xs:sequence>
      <xs:element name="id" type="xs:anyURI"/>
      <xs:element name="q" type="xs:string" minOccurs="0"/>
      <xs:element name="a" type="xs:string" minOccurs="0"/>
    </xs:sequence>
  </xs:complexType>
  <xs:complexType name="AnyAnswerType">
    <xs:sequence>
      <xs:element name="id" type="xs:anyURI"/>
      <xs:element name="a" type="xs:base64Binary"/>
    </xs:sequence>
  </xs:complexType>
  </xs:schema>

```

FIG. 9B

Element/Attribute (with @)		No. allowed	Data Type	Description & Value		
TPT						
	@majorProtocolVersion	1	Integer, range 0..15	Major Protocol Version		
	@minorProtocolVersion	0..1	integer, range 0..15	Minor Protocol version		
	@id	1	anyURI	segment_id = domain_name/program_id		
	@tptVersion	1	unsignedByte	Data version of this TPT		
	@expireDate	0..1	dateTime	Date after which this TPT will not be used		
	@serviceId	0..1	UnsignedShort	NRT service_id		
	@baseURL	0..1	anyURI	Base URL for all relative URLs in TPT		
	Capabilities	0..1	nrt:CapabilitiesType	Essential capabilities for this segment		
	LiveTrigger	0..1		Info on Internet live trigger delivery		
	@URL	1	anyURI	URL of server for live triggers		
		@pollPeriod	0..1	UnsignedByte	Short polling period in seconds	
	TDO		1..N	TDO for this segment		
		@appId	1	unsignedShort	Application ID, for reference by trigger	
		@appType	0..1	integer, range 0-15	Application type (default: 1="TDO")	
		@appName	0..1	string	Display name (for viewer launch consent)	
		@globalId	0..1	anyURI	Globally unique app ID	
		@appVersion	0..1	unsignedByte	Version of this app	
		@cookieSpace	0..1	UnsignedByte	Persistent storage needed; default=0	
		@frequencyOfUse	0..1	integer, range 0..15	code values TBD	
		@expireDate	0..1	dateTime	Expire date for caching	
@testTDO		0..1	boolean	Flag for test TDO; default="false"		
@availInternet		0..1	boolean	Default="true"		
@availBroadcast		0..1	boolean	Default="true"		
URL		1..N	anyURI	TDO URL(s) -- first URL is entry point		
Capabilities		0..1	nrt:CapabilitiesType	Essential capabilities to present this TDO		
ContentItem		0..N		Content item used by this TDO		
		URL	1..N	anyURI	URL(s) of content items	
			@updatesAvail	0..1	boolean	Default="false"
			@pollPeriod	0..1	UnsignedByte	Short polling period in seconds
			@size	0..1	24-bit integer	Size of content item, in kilobytes
			@availInternet	0..1	boolean	Default="true"
			@availBroadcast	0..1	boolean	Default="true"
	Event		1..N	Event targeted to this TDO		
	@eventId	1	unsignedShort	Event ID, for reference by trigger		
		@action	1	unsignedByte	"register" , etc.; code values TBD	
		@destination	0..1	unsignedByte	Targeted device type, e.g., HDTV, SDTV, external_1, etc. ; code values TBD	

FIG. 10

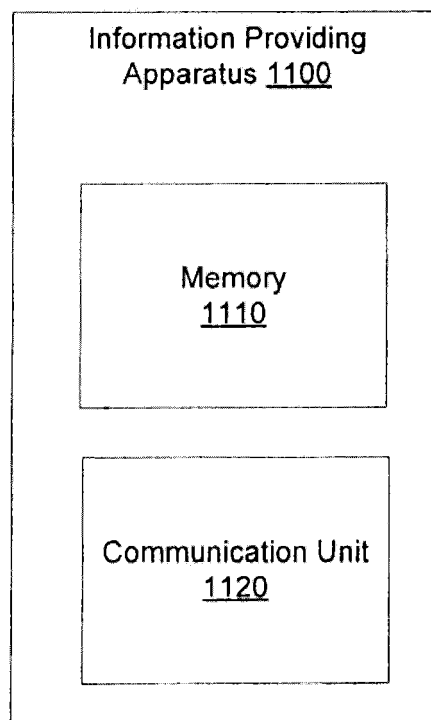


FIG. 11

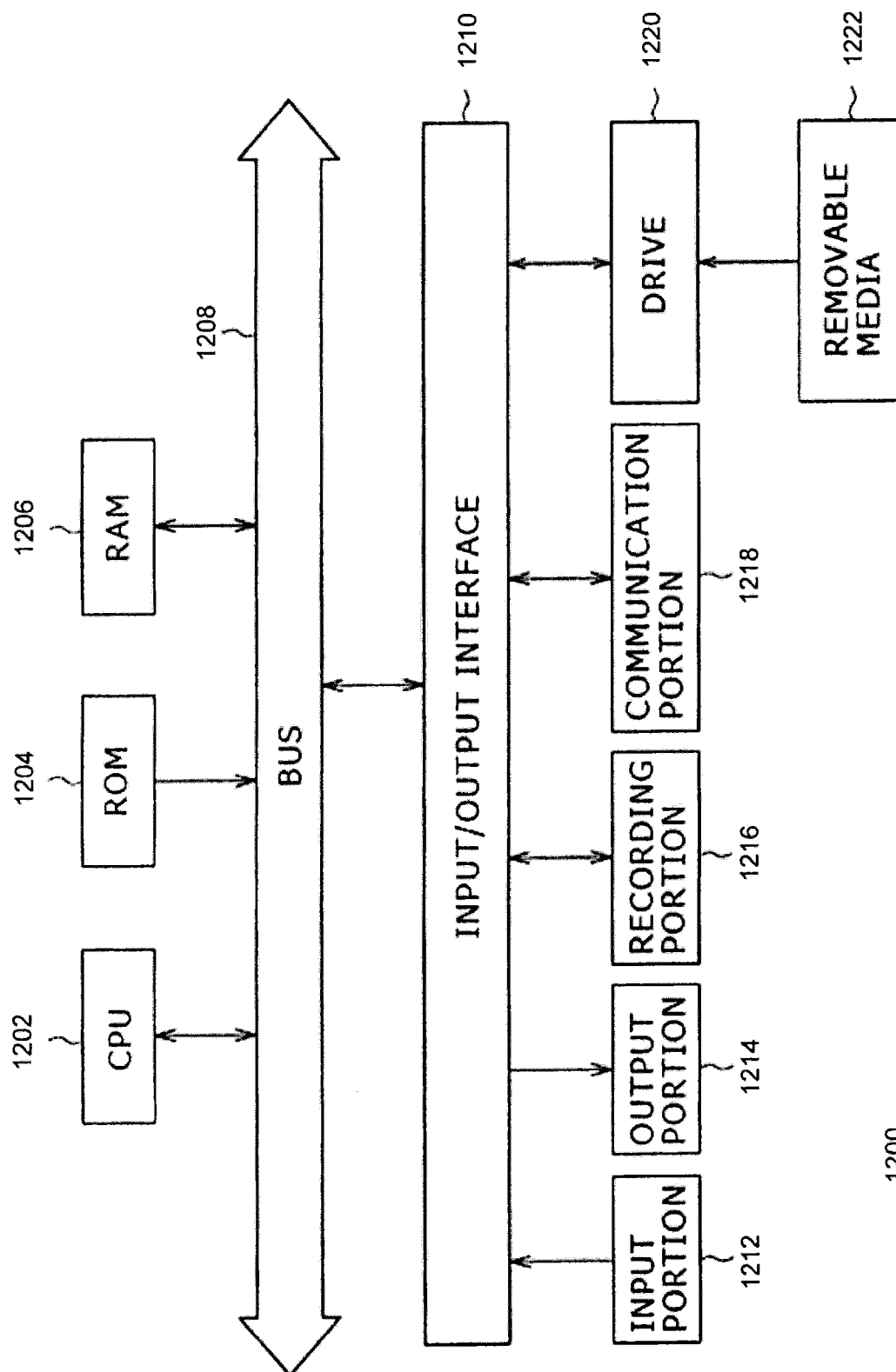


FIG. 12