

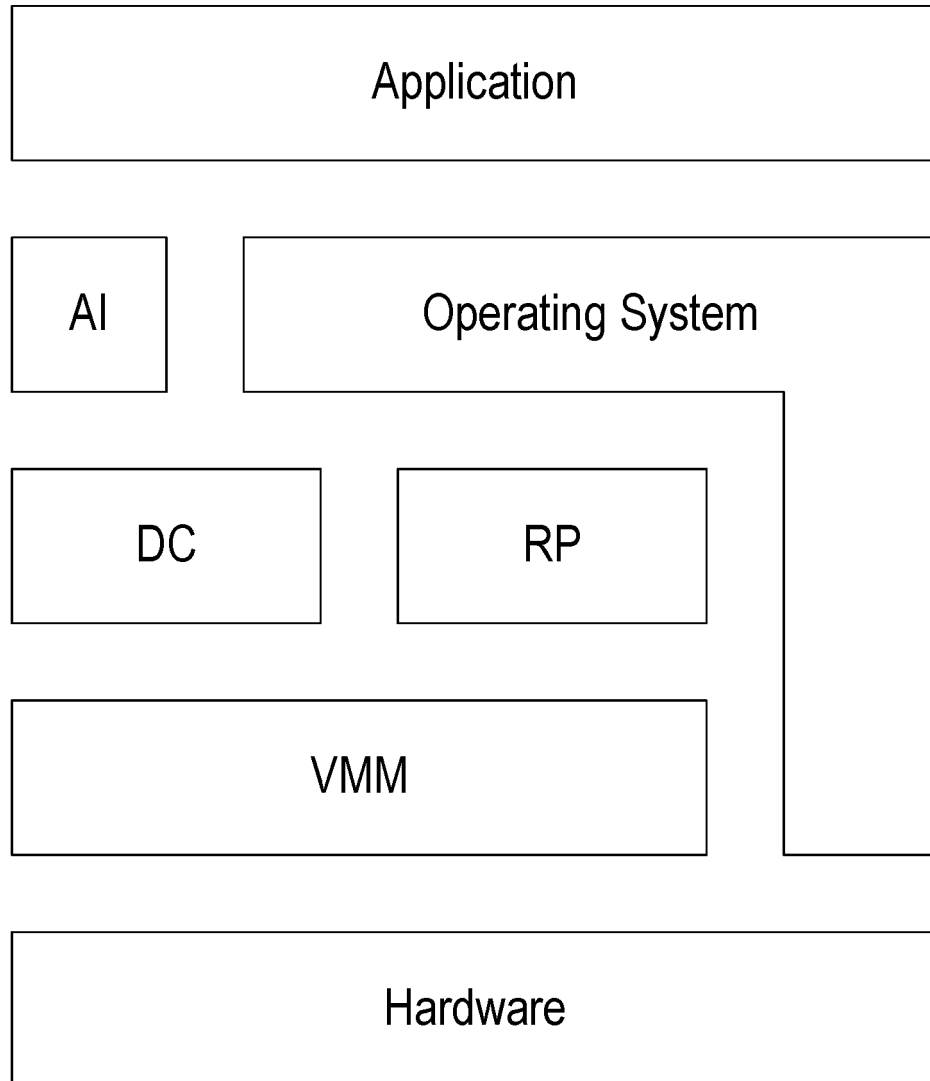
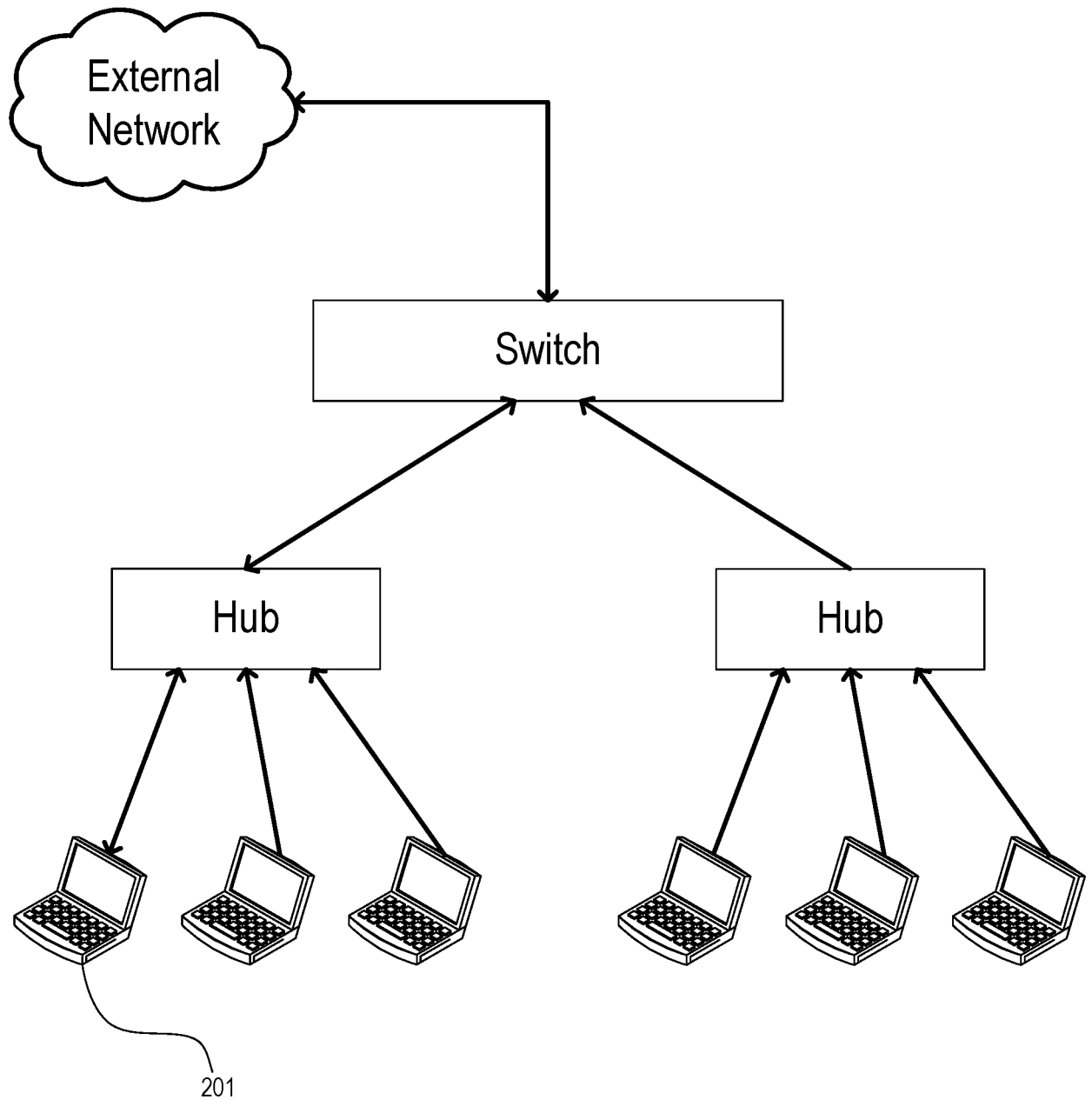


FIG. 1

**FIG. 2**

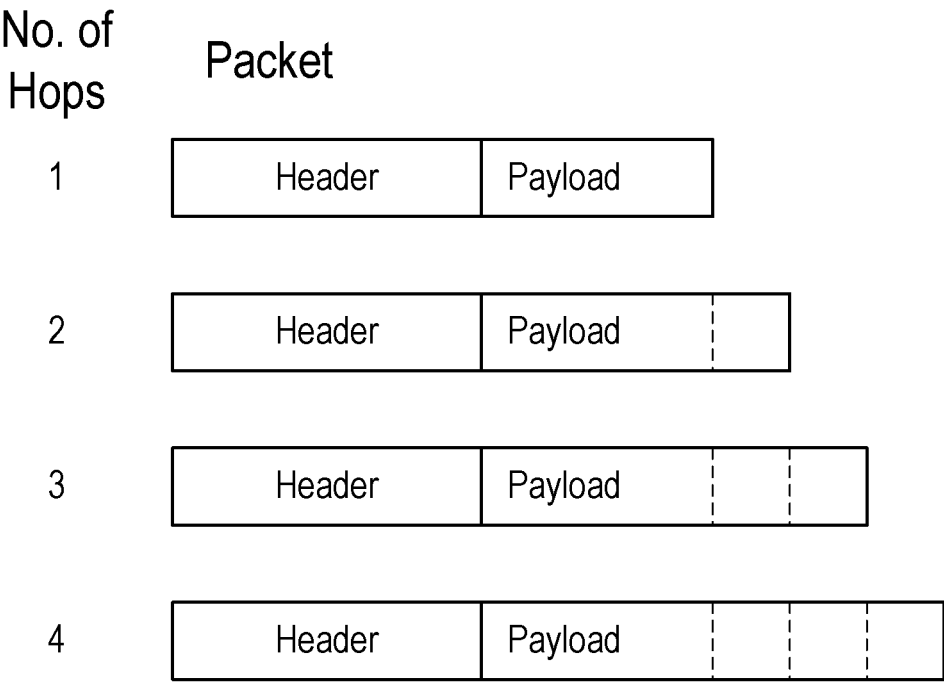
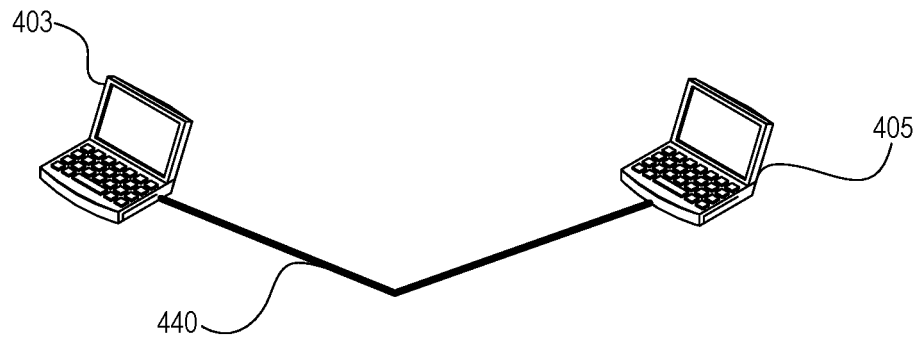
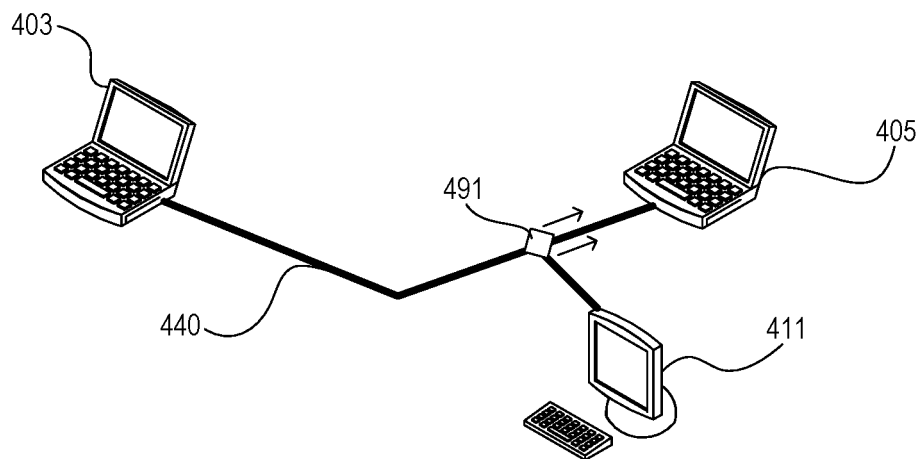
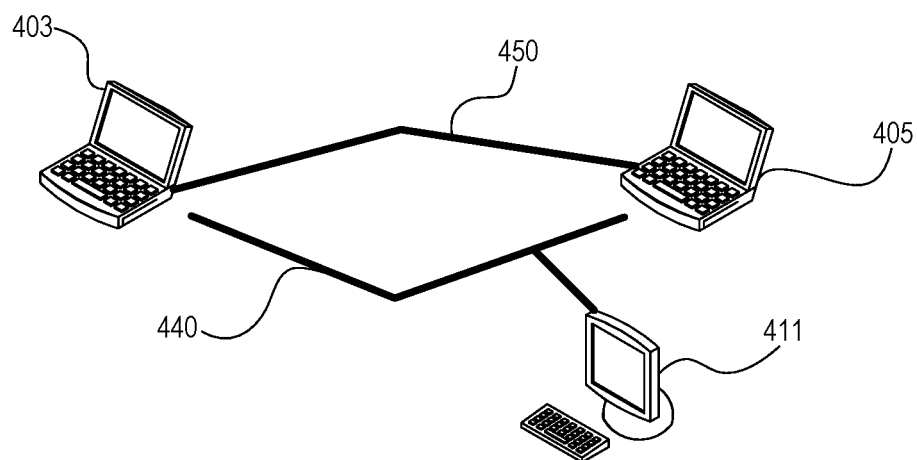


FIG. 3

**FIG. 4A****FIG. 4B****FIG. 4C**

510

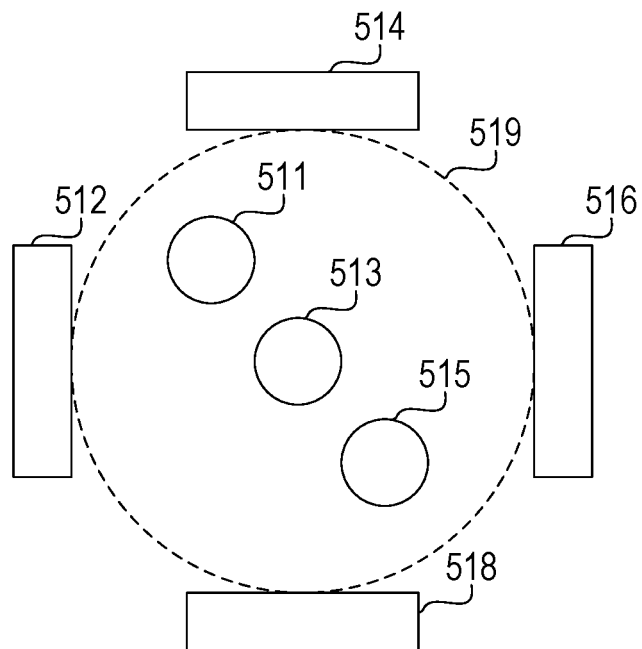


FIG. 5A

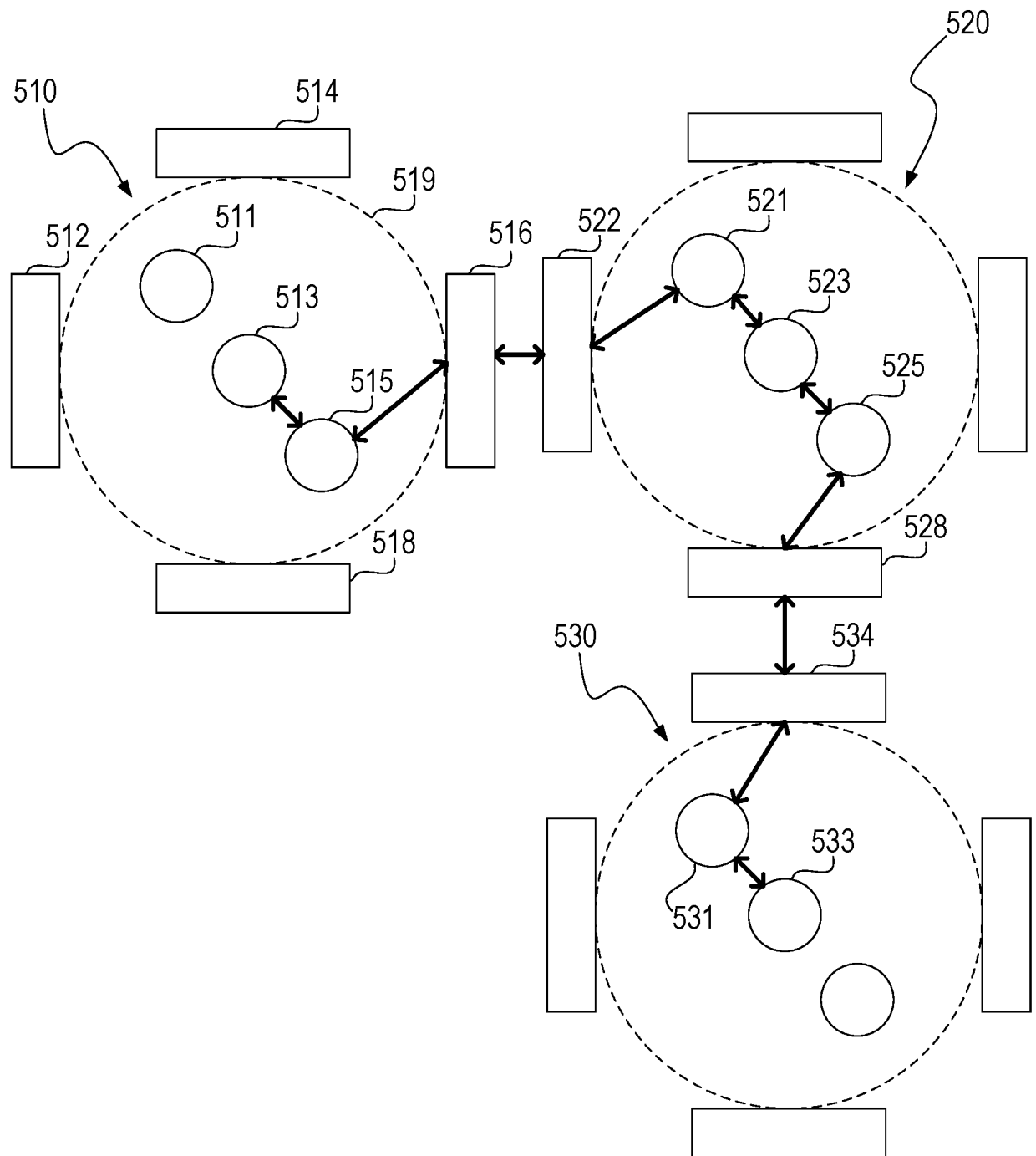


FIG. 5B

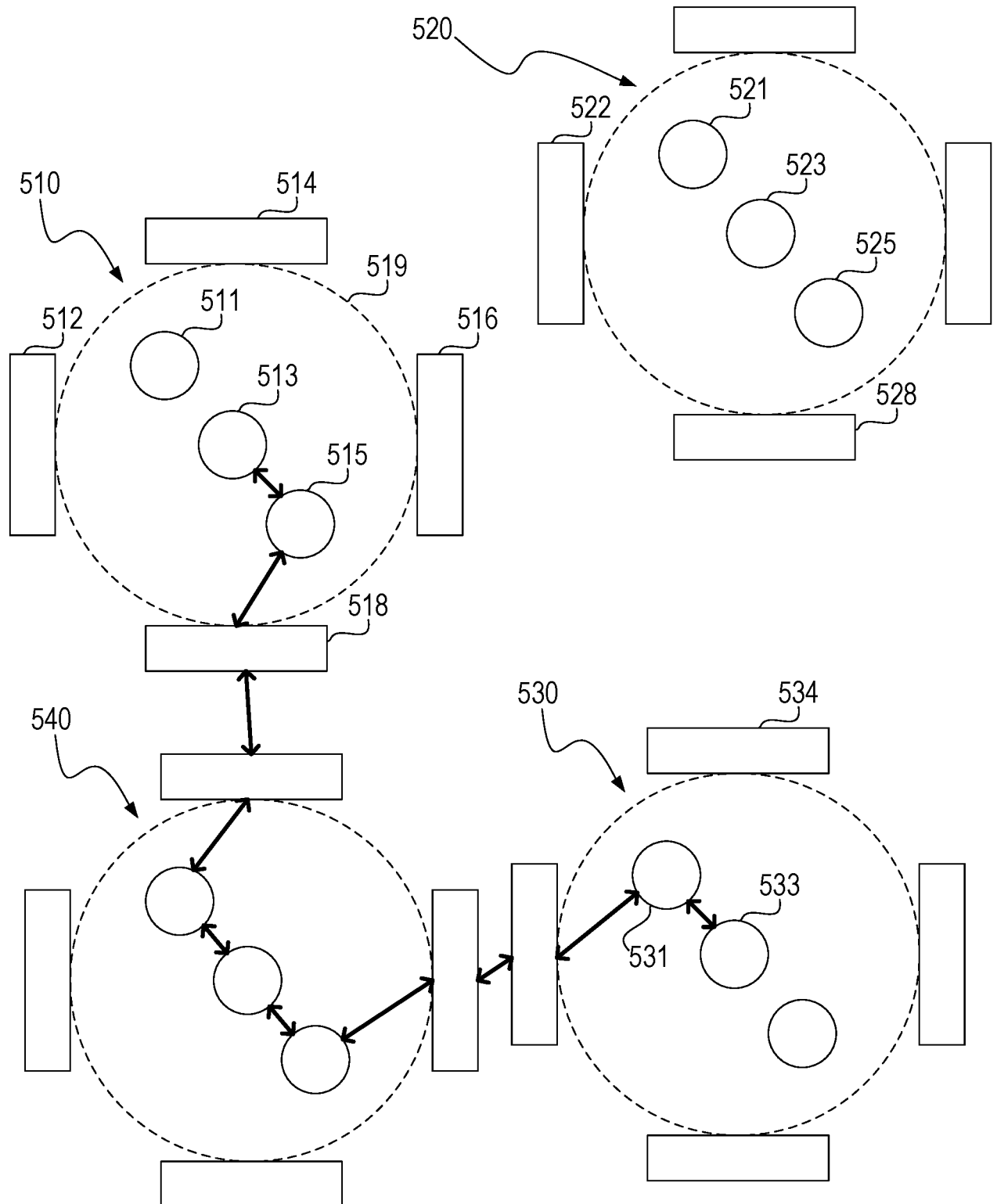


FIG. 5C

Table 1**Layer 2**

<i>Bytes</i>	<i>Description</i>
6 :	Destination MAC Address
6 :	Source MAC Address

Layer 3

<i>Bytes</i>	<i>Description</i>
1 :	Version
1 :	Type of Service
1 :	Time to Live, Control Flag
1 :	Protocol Number
4-16 :	Destination IP Address
4-16 :	Source IP Address

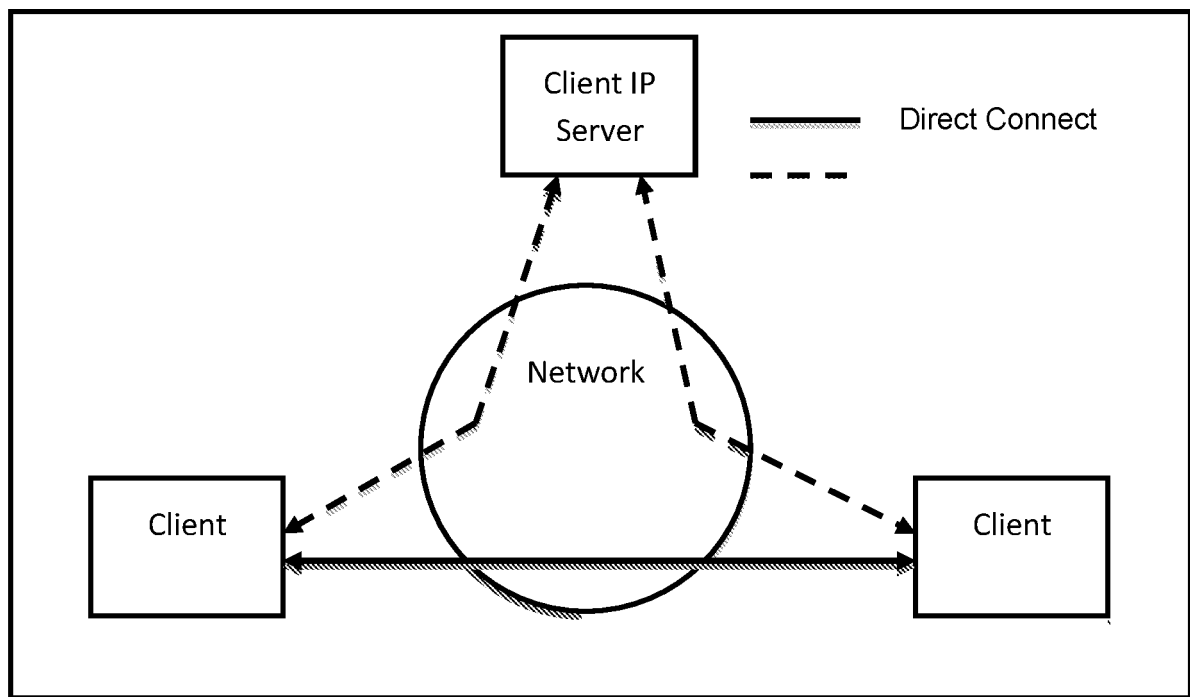
Layer 4

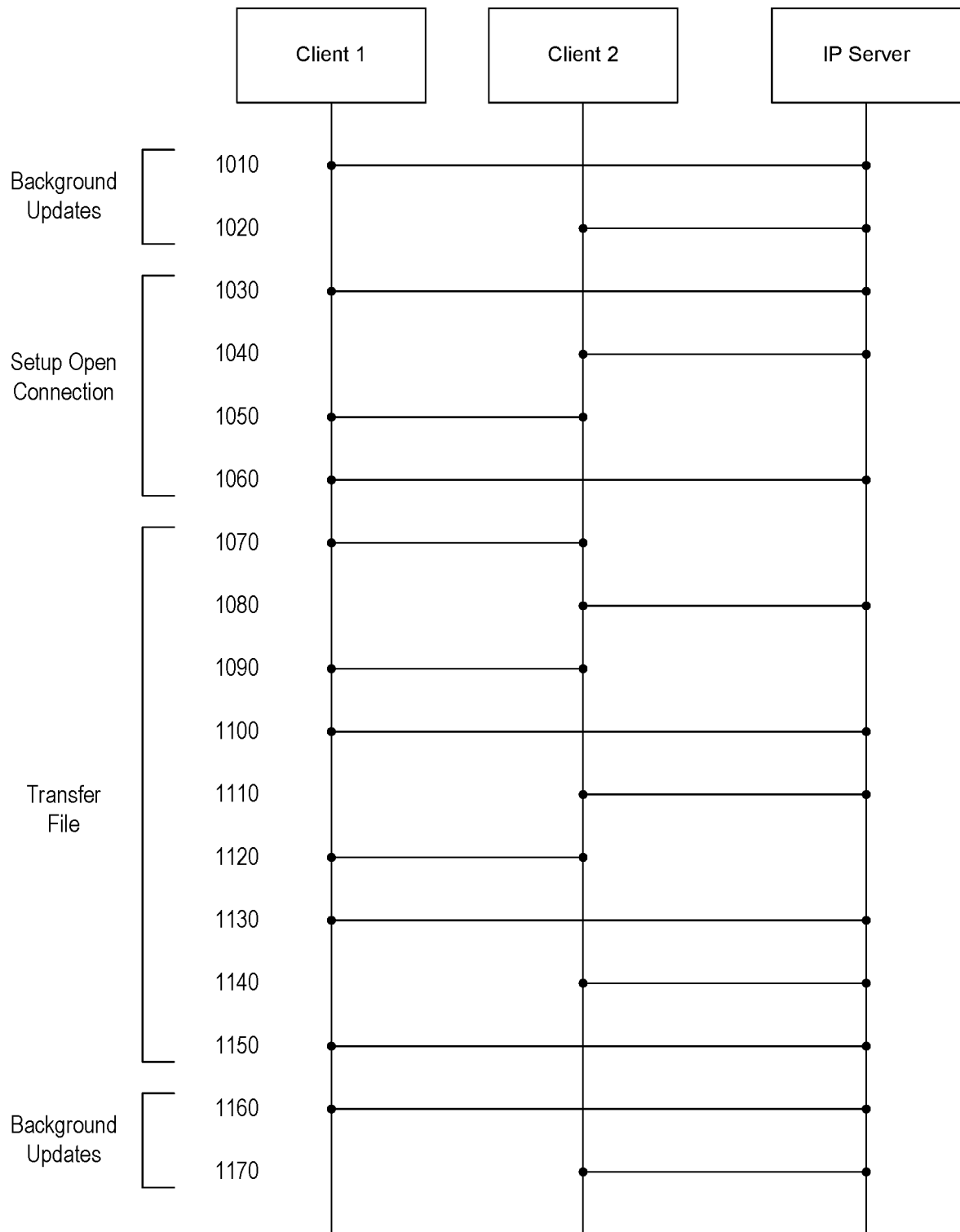
<i>Bytes</i>	<i>Description</i>
2 :	Source Port
2 :	Destination Port
1 :	TCP Flag

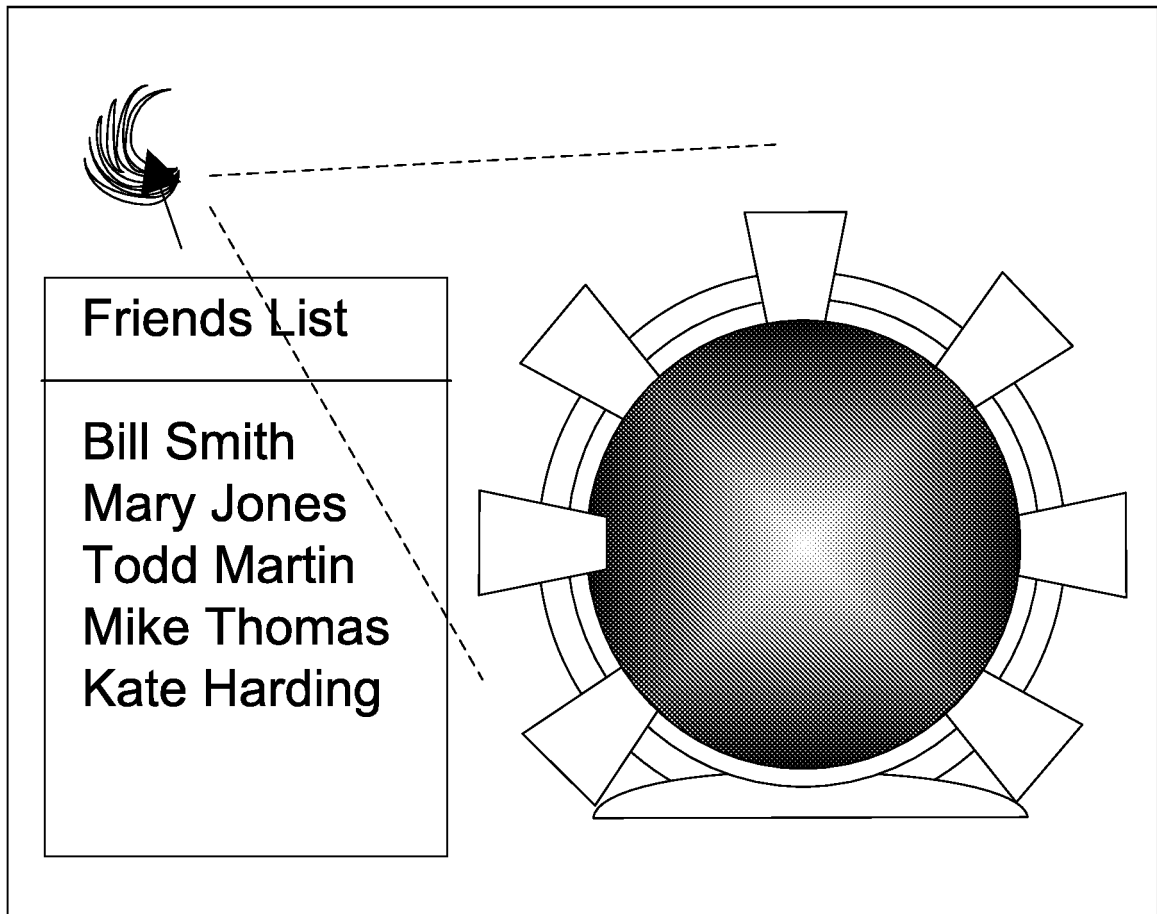
Layer 5

<i>Bytes</i>	<i>Description</i>
2 :	DNI Flag
4 :	DNI SHA-1/MD5 Hash

FIG. 6

**FIG. 7**

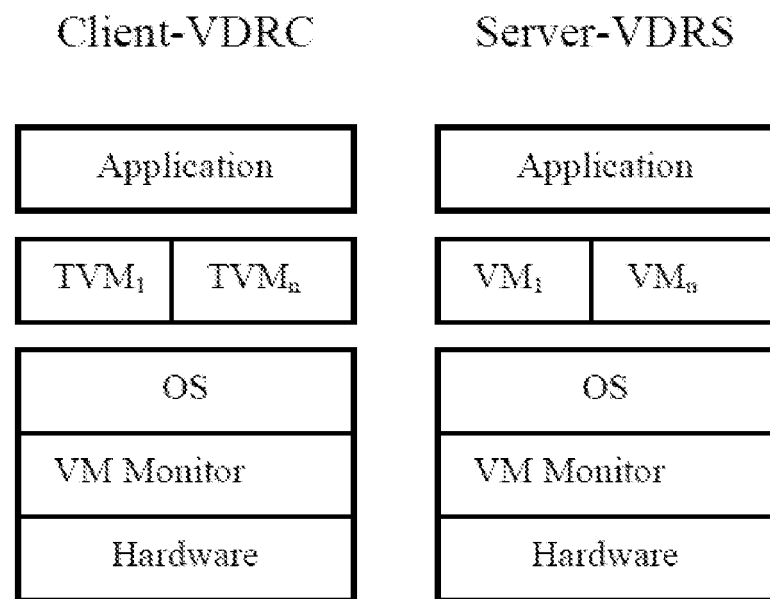
**FIG. 8**

**FIG. 9B**

Download Requests	Potential Downloads completed by Client	Percent Reduction in Resources
1	0	0%
2	1	50%
3	2	66.67%
4	3	75%
5	4	80%

Table 9

FIG. 10



OS – Operating System

TVM – Thin Virtual Machine

VM – Virtual Machine

VDRC – Virtual Dispersive Routing Client

VDRS – Virtual Dispersive Routing Server

VDR Client and Server Architectures

FIG. 11

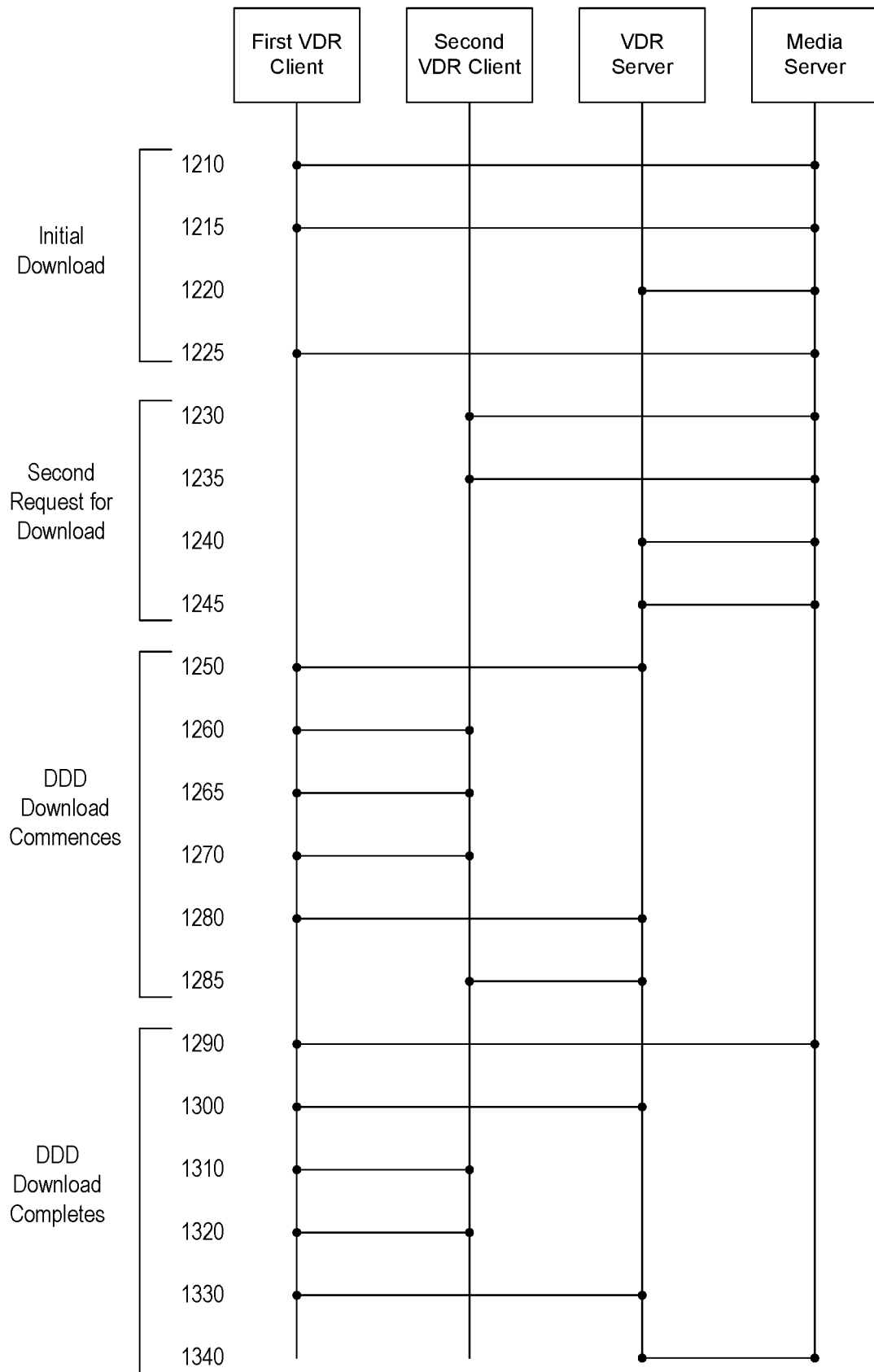
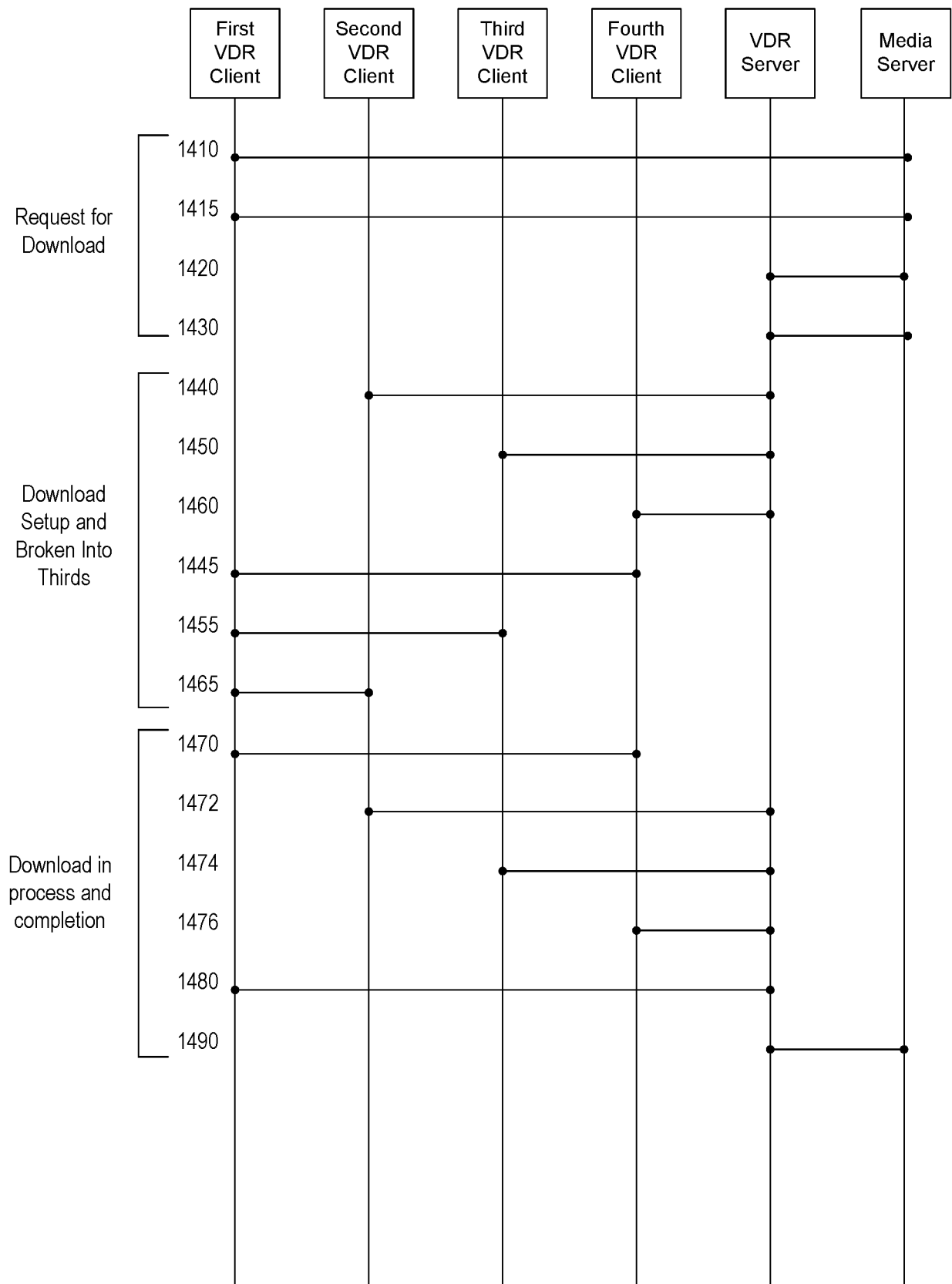
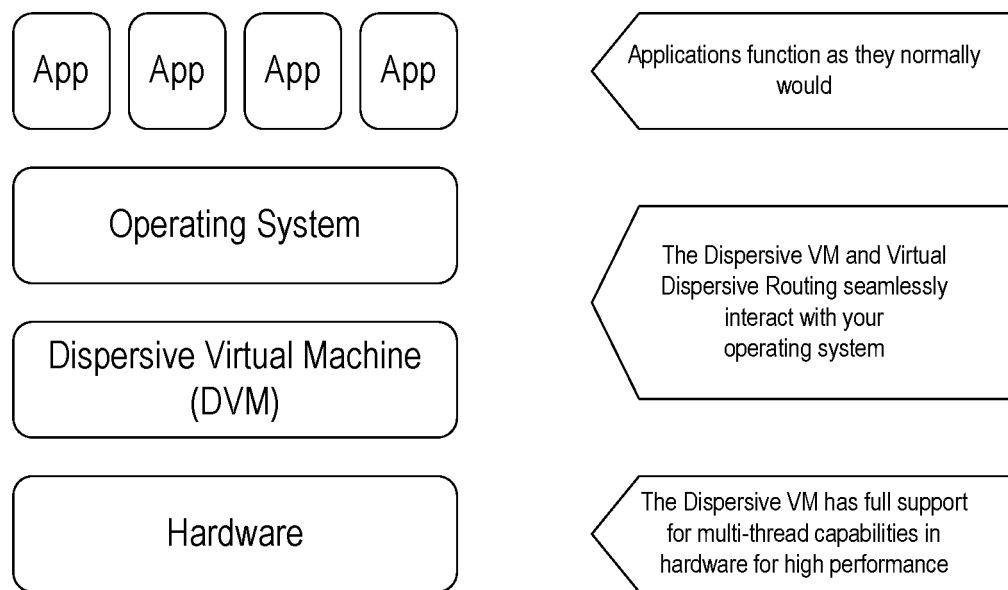


FIG. 12

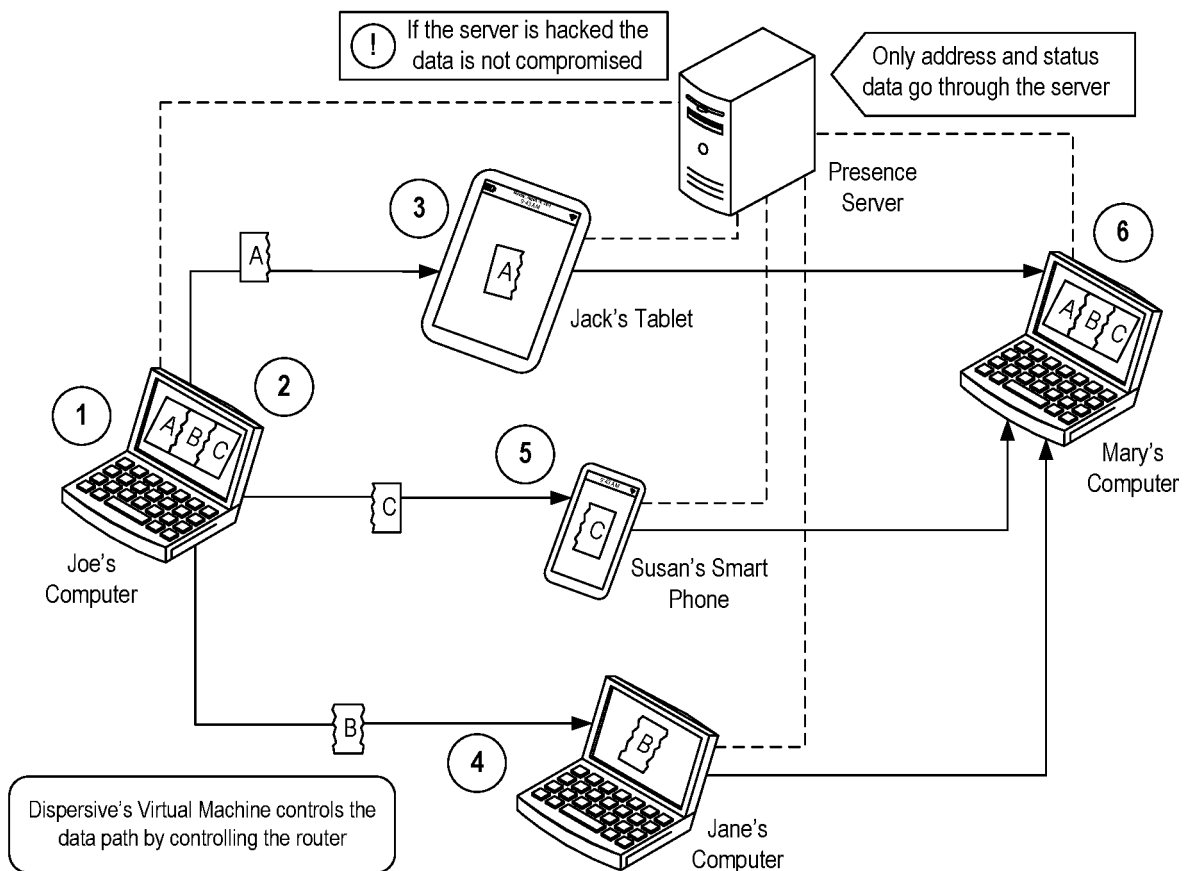
**FIG. 13**

**Important Facts**

- V2VNet is a software application that is downloaded and installed onto each client (PCT, Smart Phone, Tablet, or Server)
- Dispersive's Virtual Machines (Software Based Computers) are inserted between the Operating System and its Network Interface to control communications
- Virtual Dispersive Networking provides unprecedented control of network communications

FIG. 14

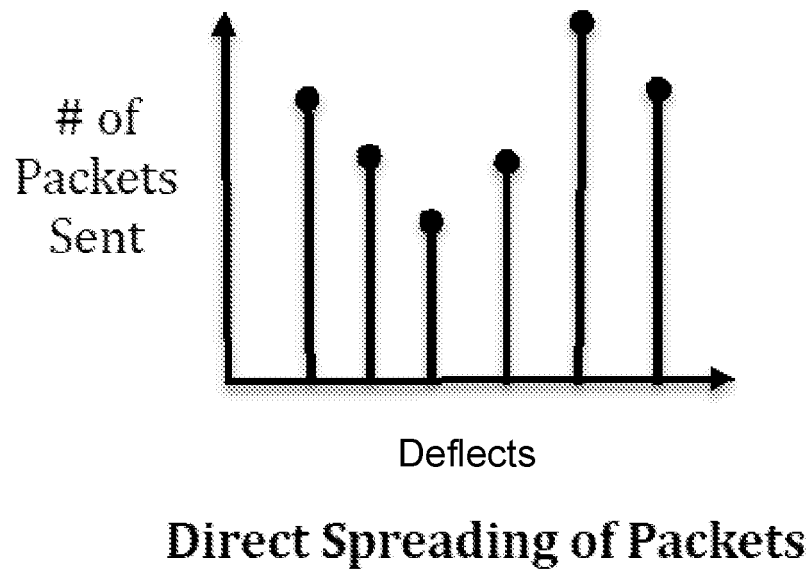
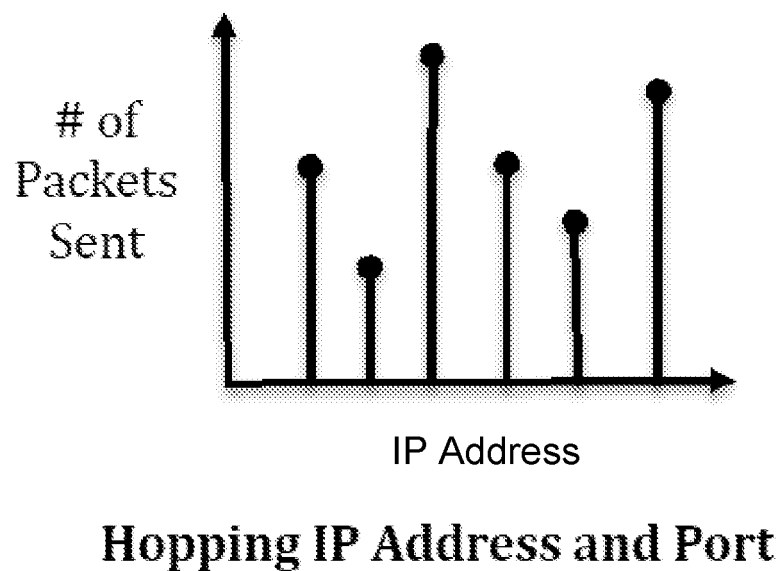
- 1 A message is being sent from Joe's computer to Mary's computer.
- 2 The message is "sliced" up into three parts (a, b, c) as seen below.
- 3 "Slice" (A) is transmitted first to Jack's tablet, and then on to Mary's computer.
- 4 "Slice" (B) is transmitted first to Jane's computer, and then on to Mary's computer.
- 5 "Slice" (C) is transmitted first to Susan's smart phone, and then on to Mary's computer.
- 6 The message is then reassembled and displayed on Mary's computer.

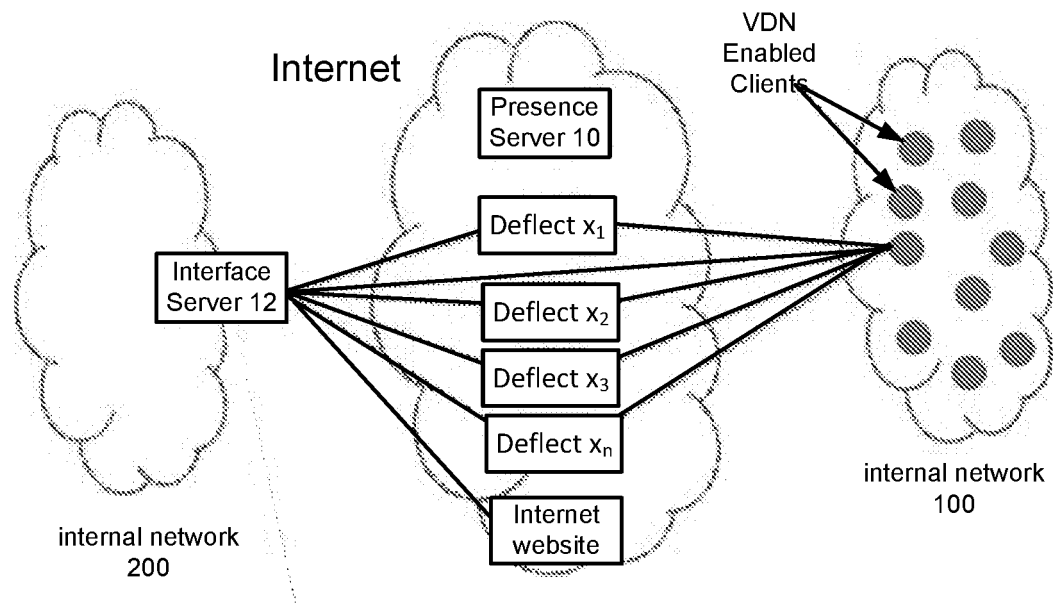
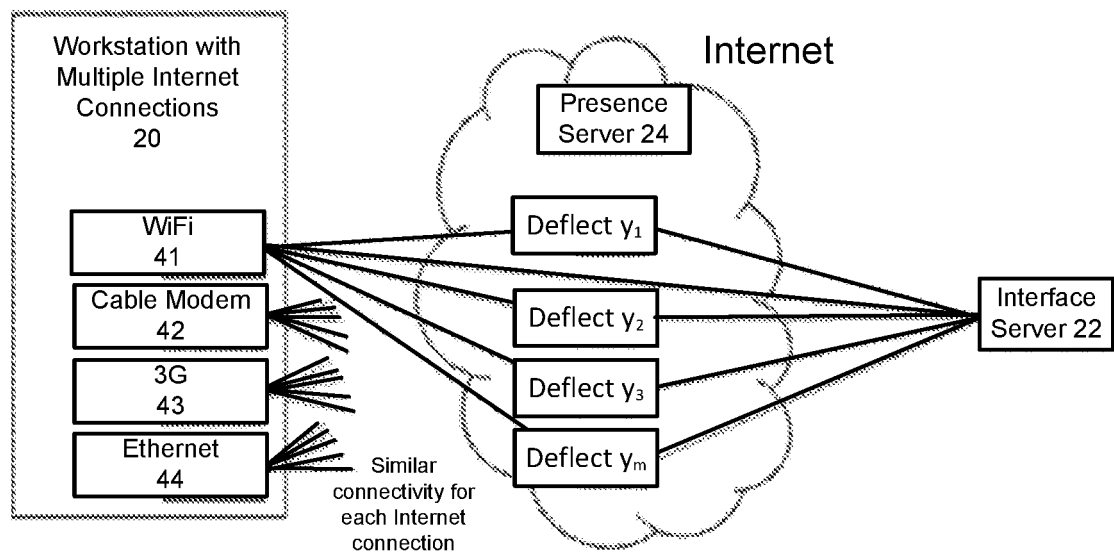


Important Facts

- Different types of clients can be on the network, such as PC's, Smart Phones, Tablets, and Servers.
- Dispersive's Virtual Machine, which controls the router, may randomly decide which paths to send the data.
- The Data (the message) is split up into different parts and each part may be sent through a different path, not the same path.
- No (message) data passes through the Server. The server acts as an "address book", only registering who is on the network at any specific time and what their IP address is.
- Data is sent directly between devices, not through the server (V2V Wireless Networking).
- Since the message does not pass through the server, it is much more difficult for a hacker to locate the data because he or she does not know where to look. The "slices" could be randomly transmitted through any of the devices on the network.
- The data is encrypted, and transmitted in "slices", therefore if a data path is found, the data would be unintelligible to the intruder, since it is only a small piece of a larger "pie".

FIG. 15

**FIG. 16****FIG. 17**

**FIG. 18****FIG. 19**

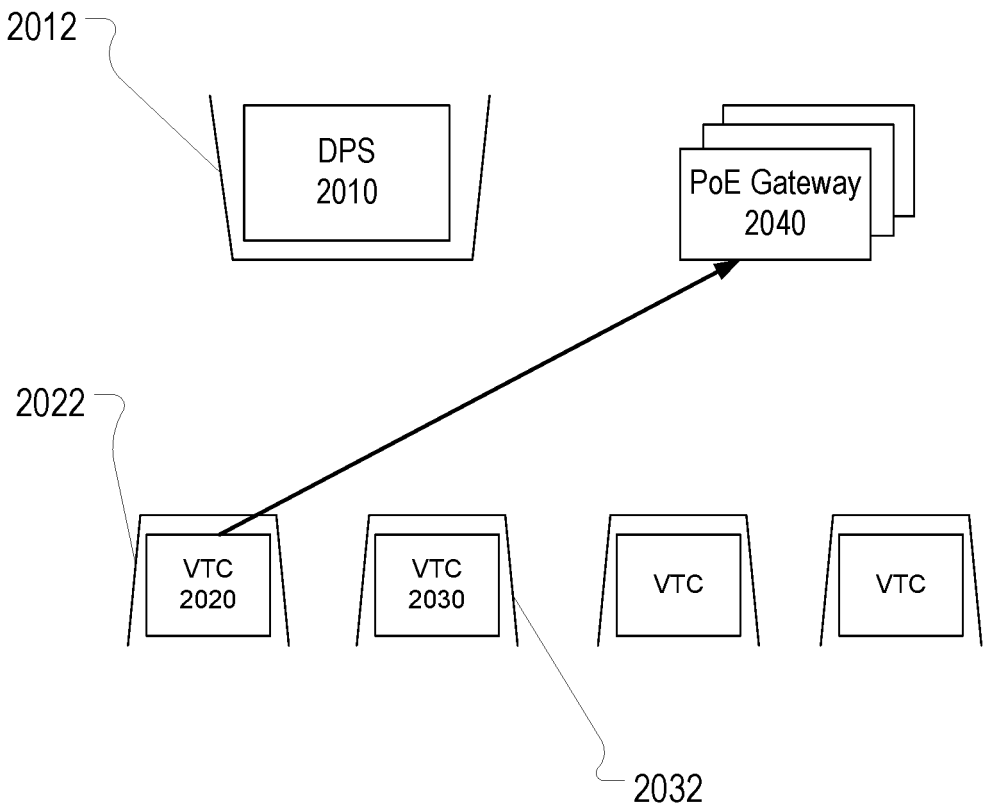


FIG. 20

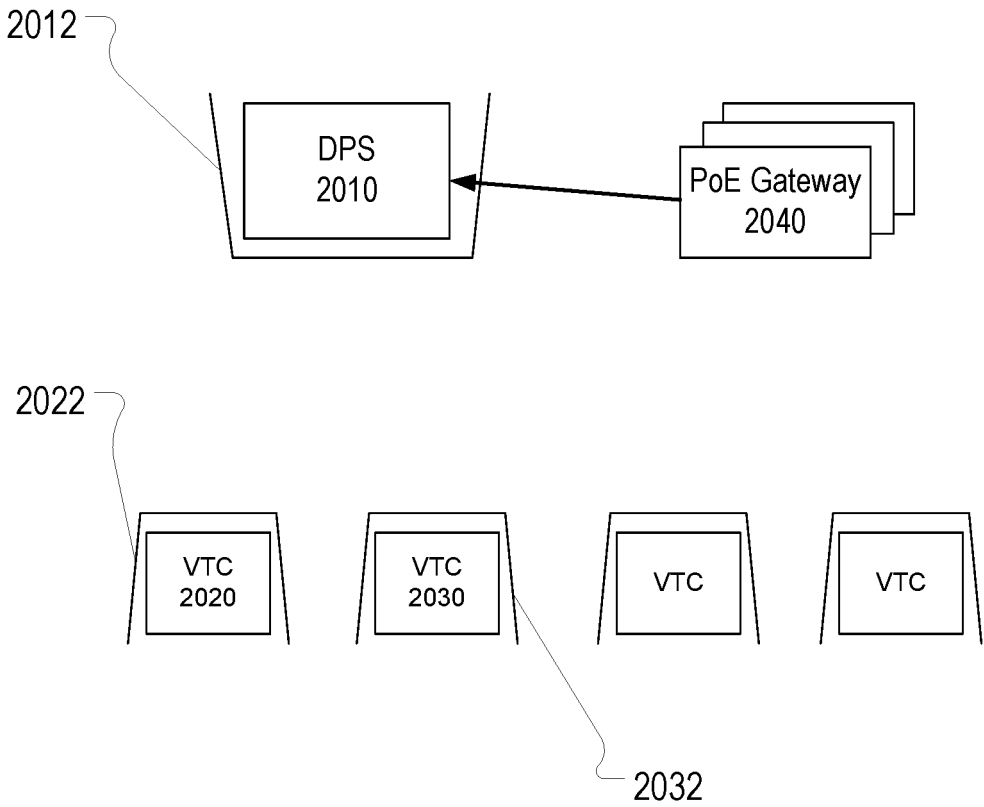


FIG. 21

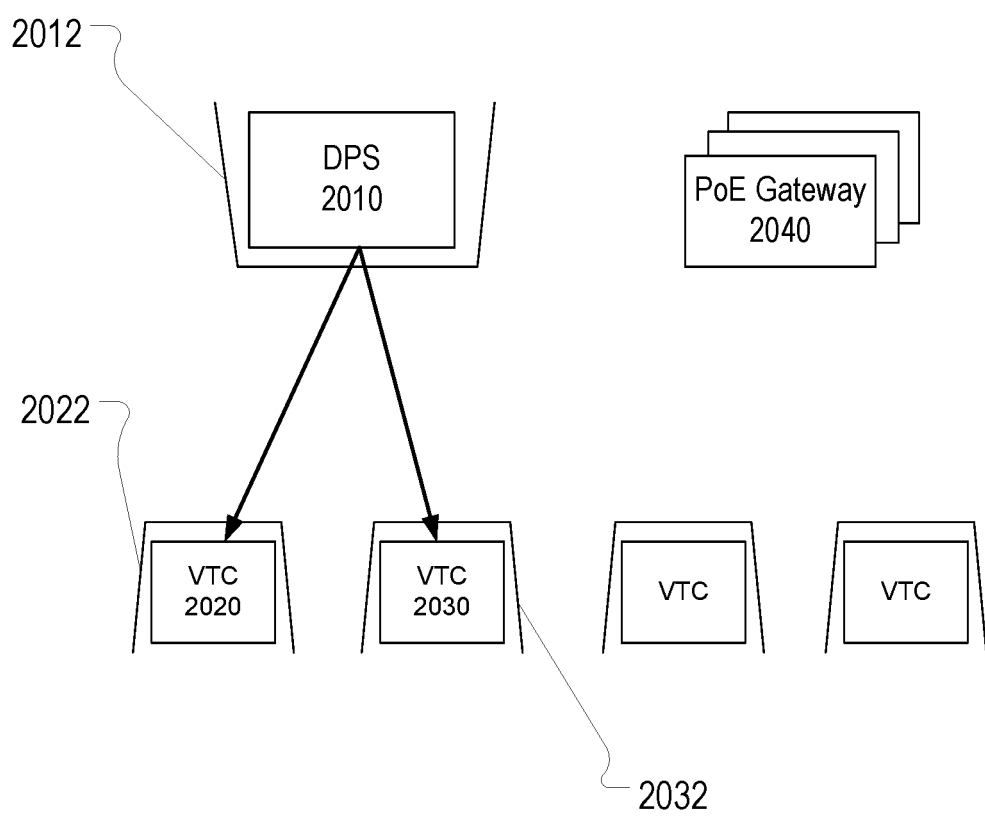


FIG. 22

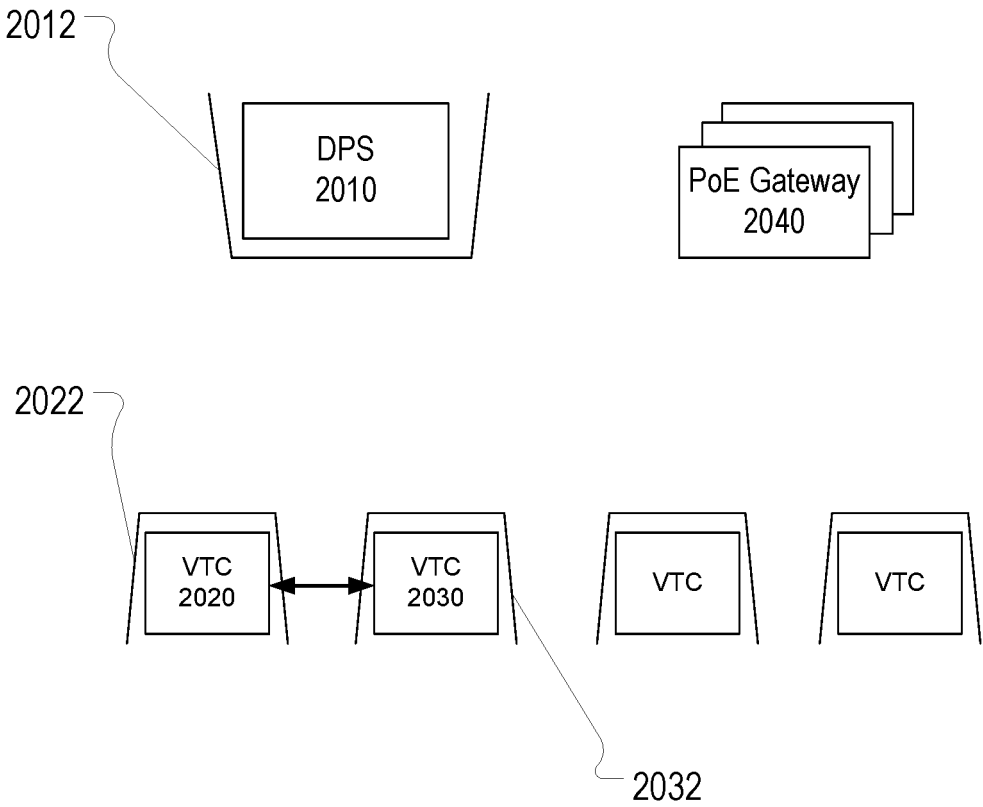


FIG. 23

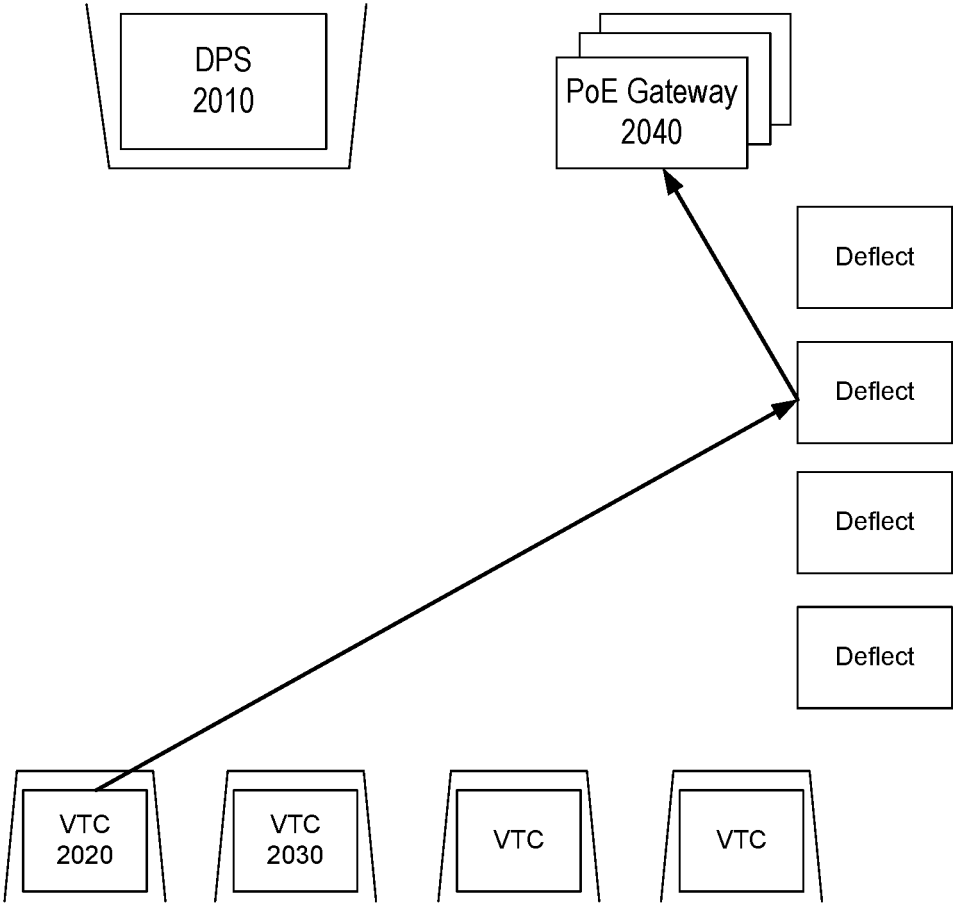


FIG. 24

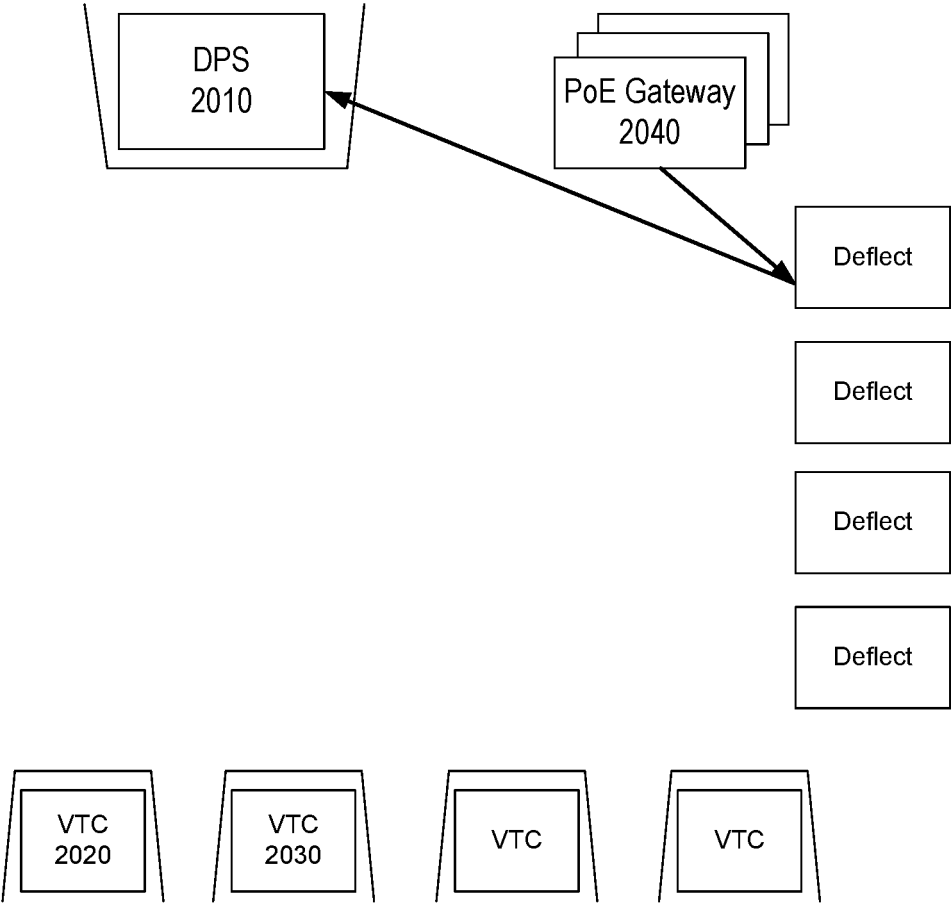


FIG. 25

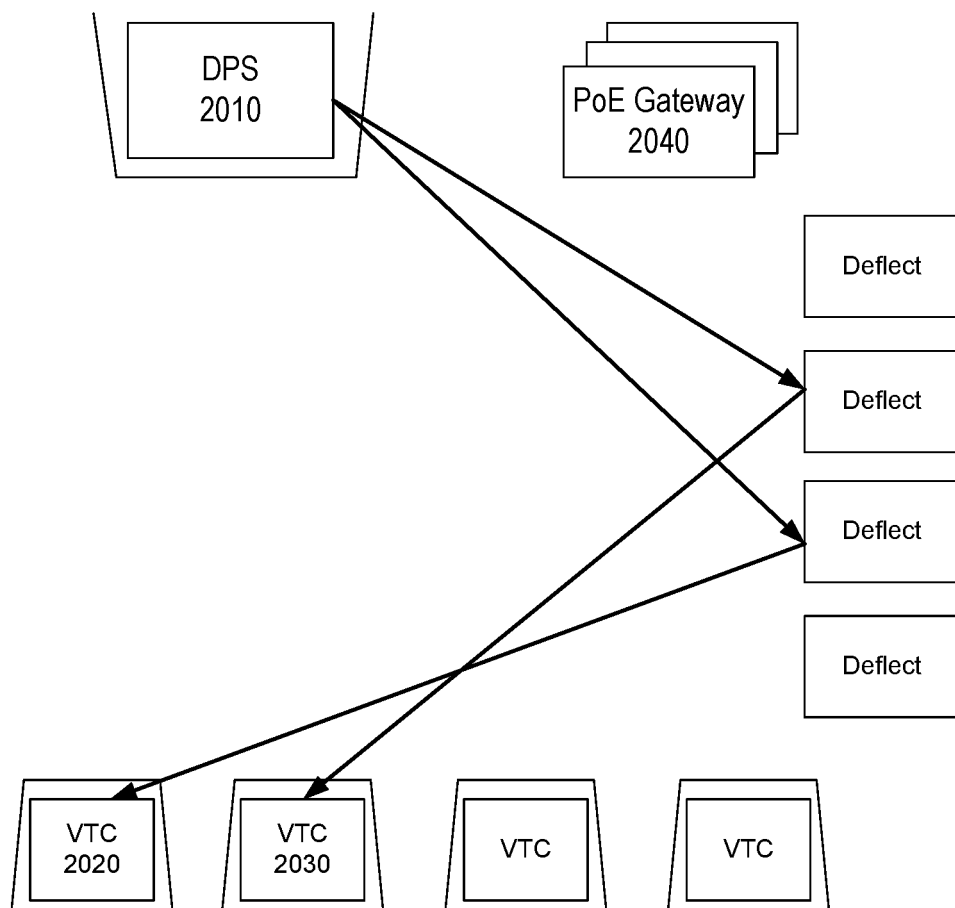


FIG. 26

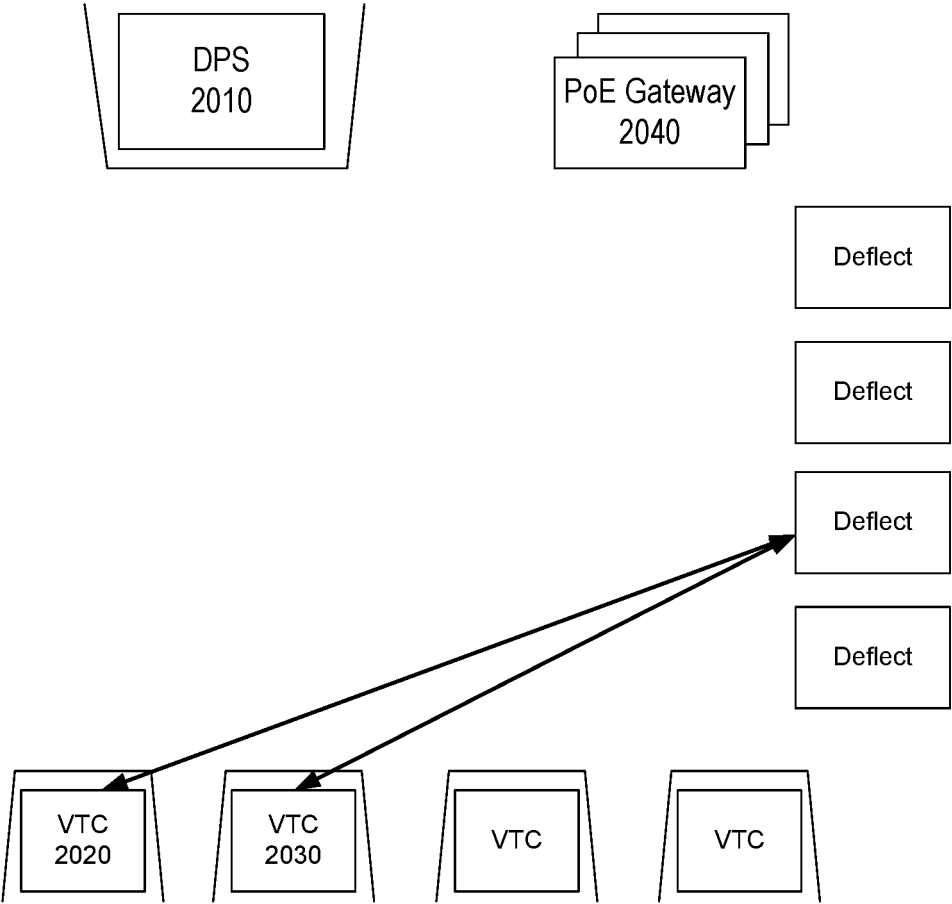


FIG. 27

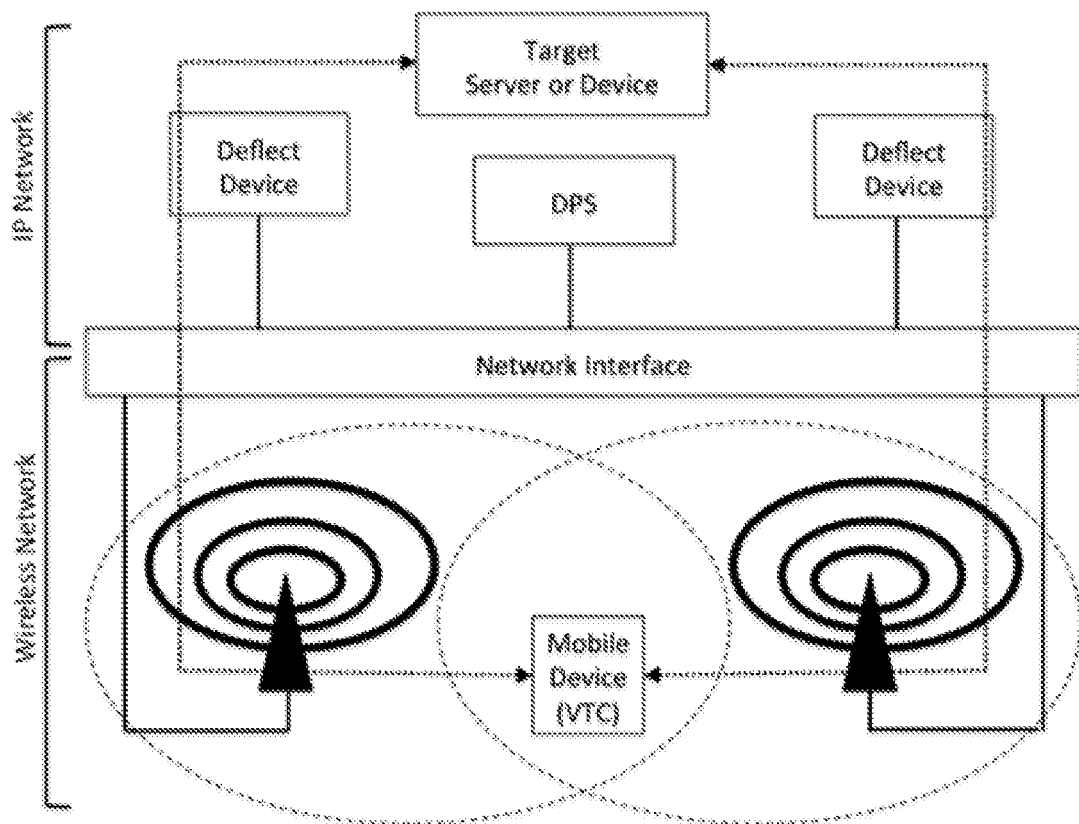
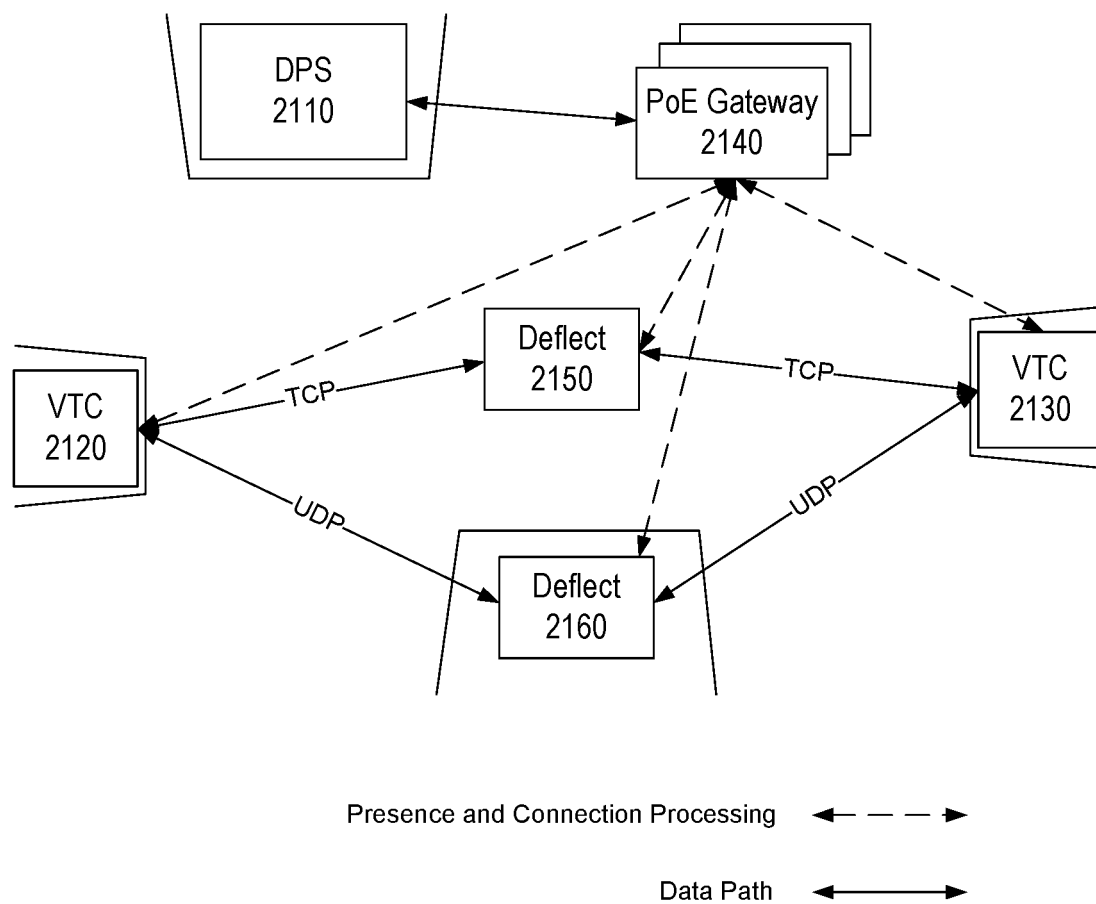


FIG. 28

**FIG. 29**

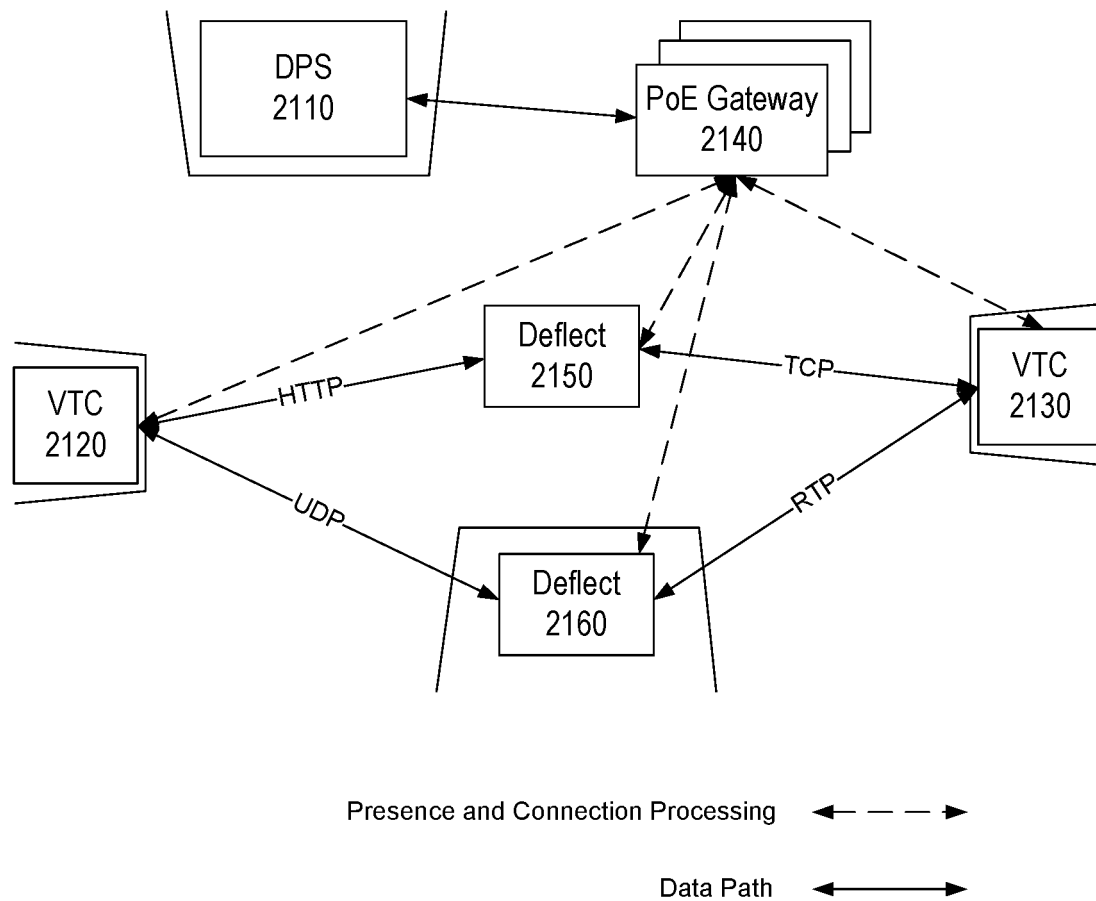


FIG. 30

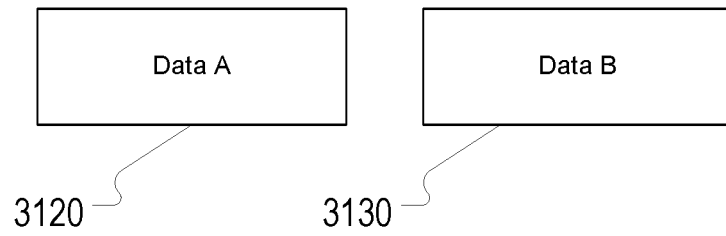


FIG. 31A

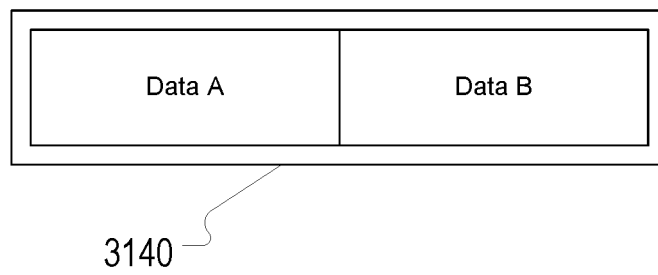


FIG. 31B

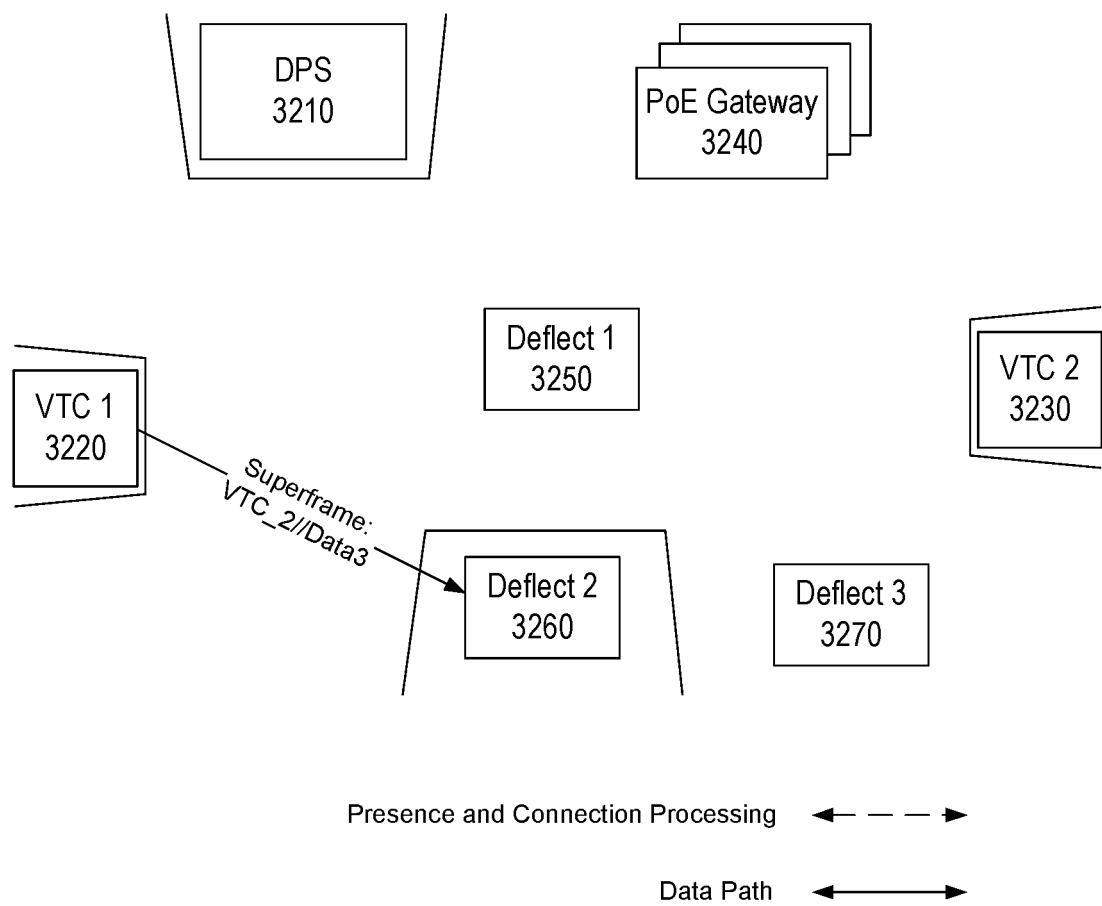


FIG. 32

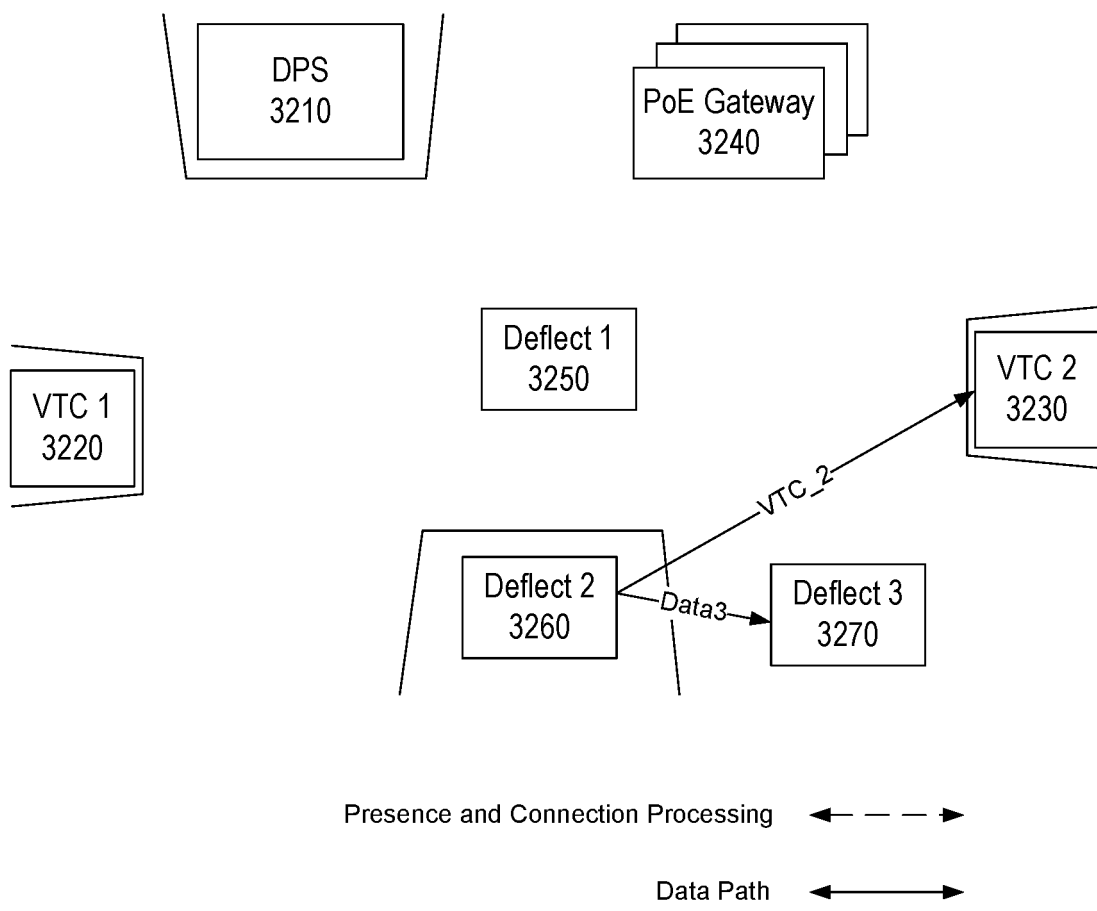


FIG. 33

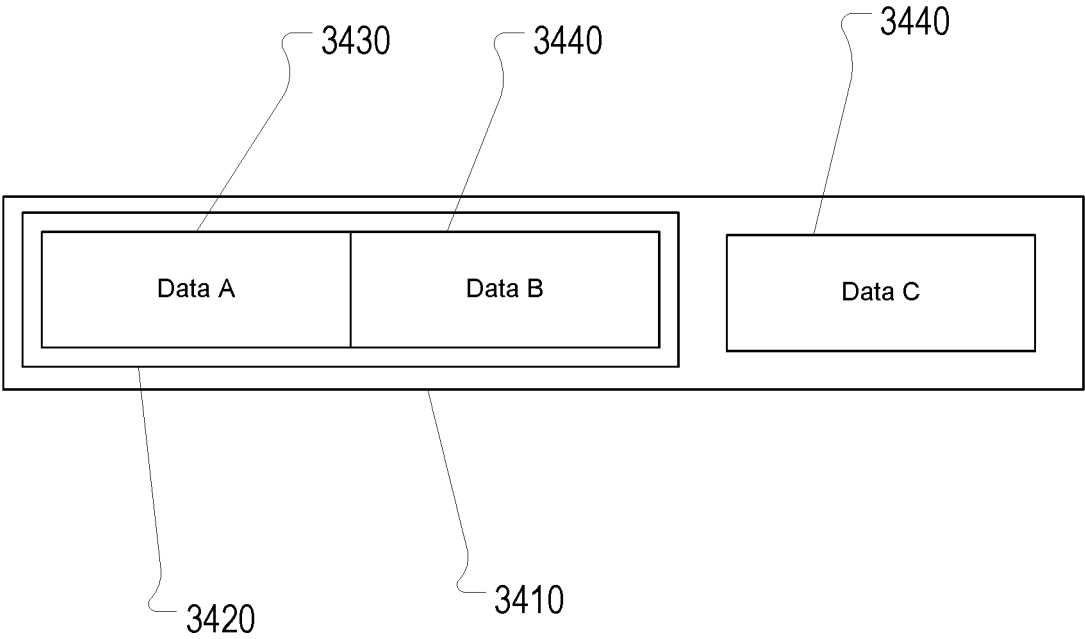
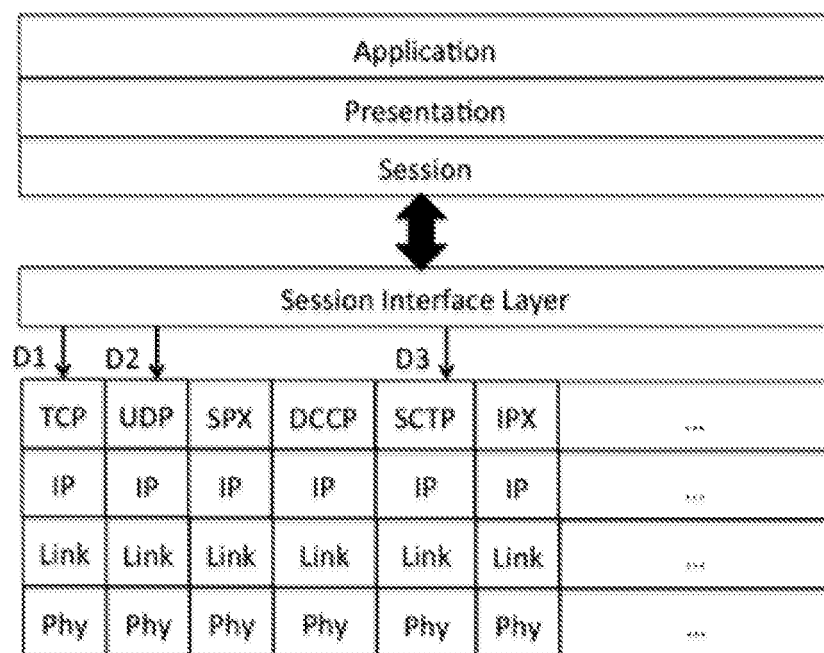


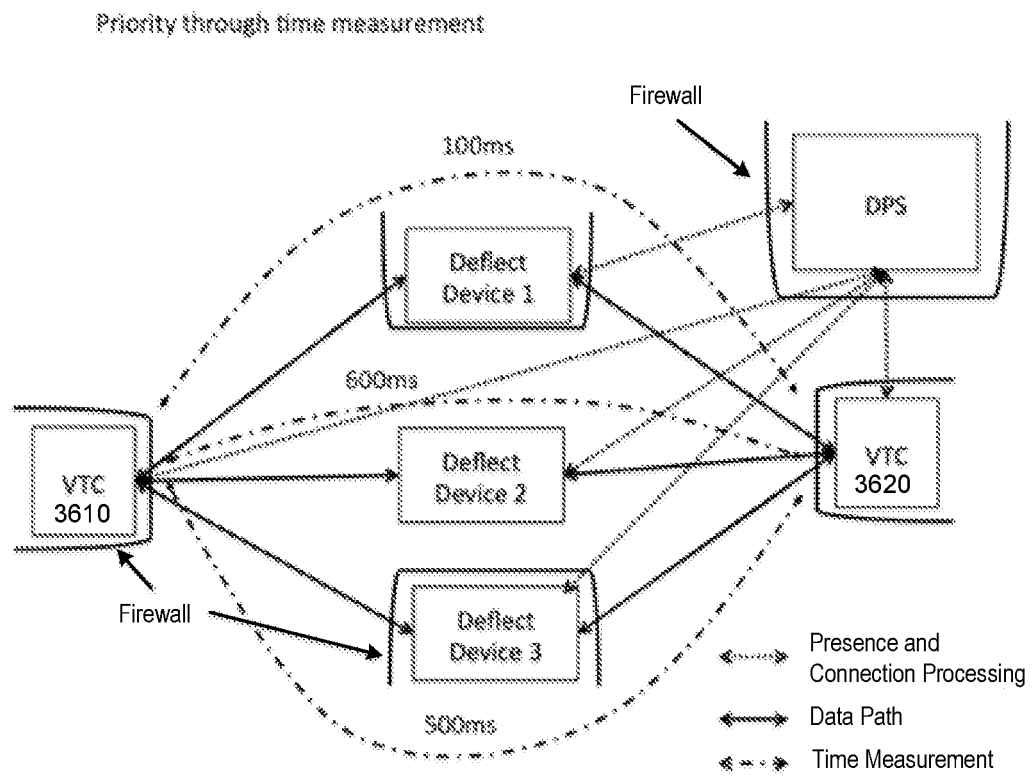
FIG. 34

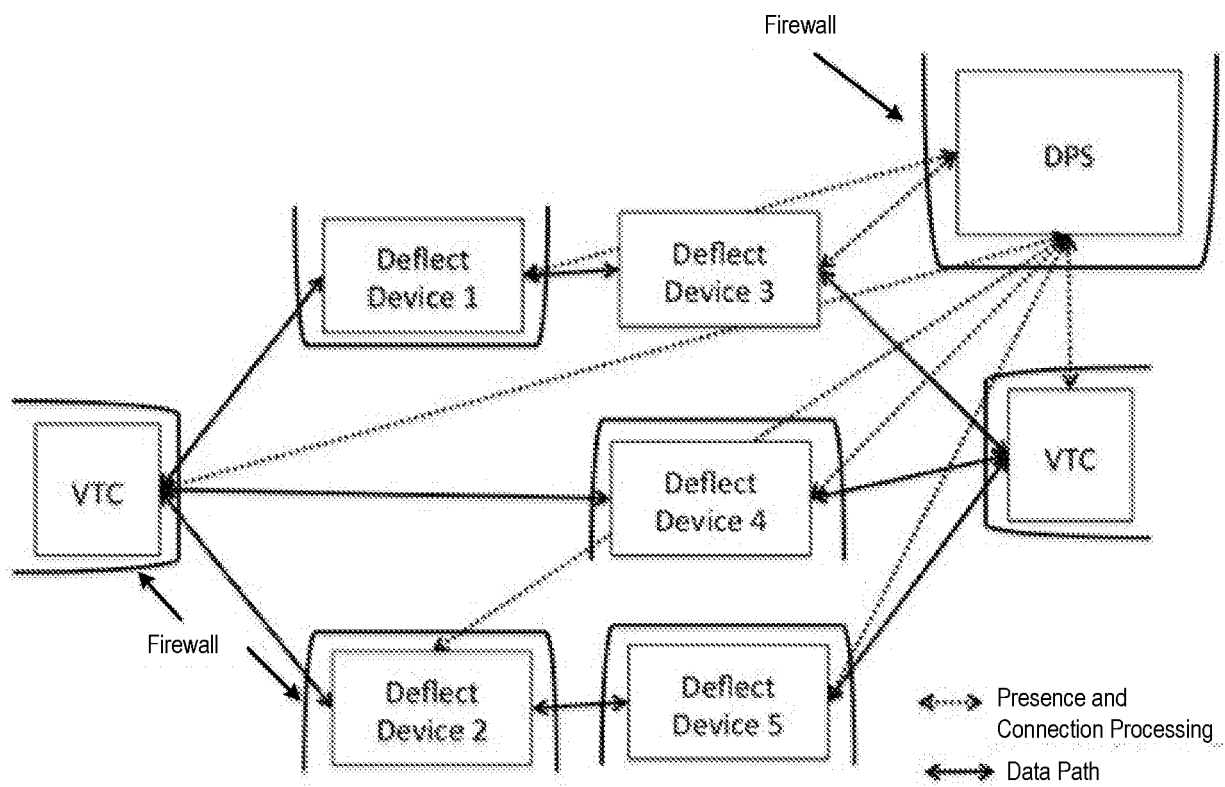
Insulate IP addresses from application

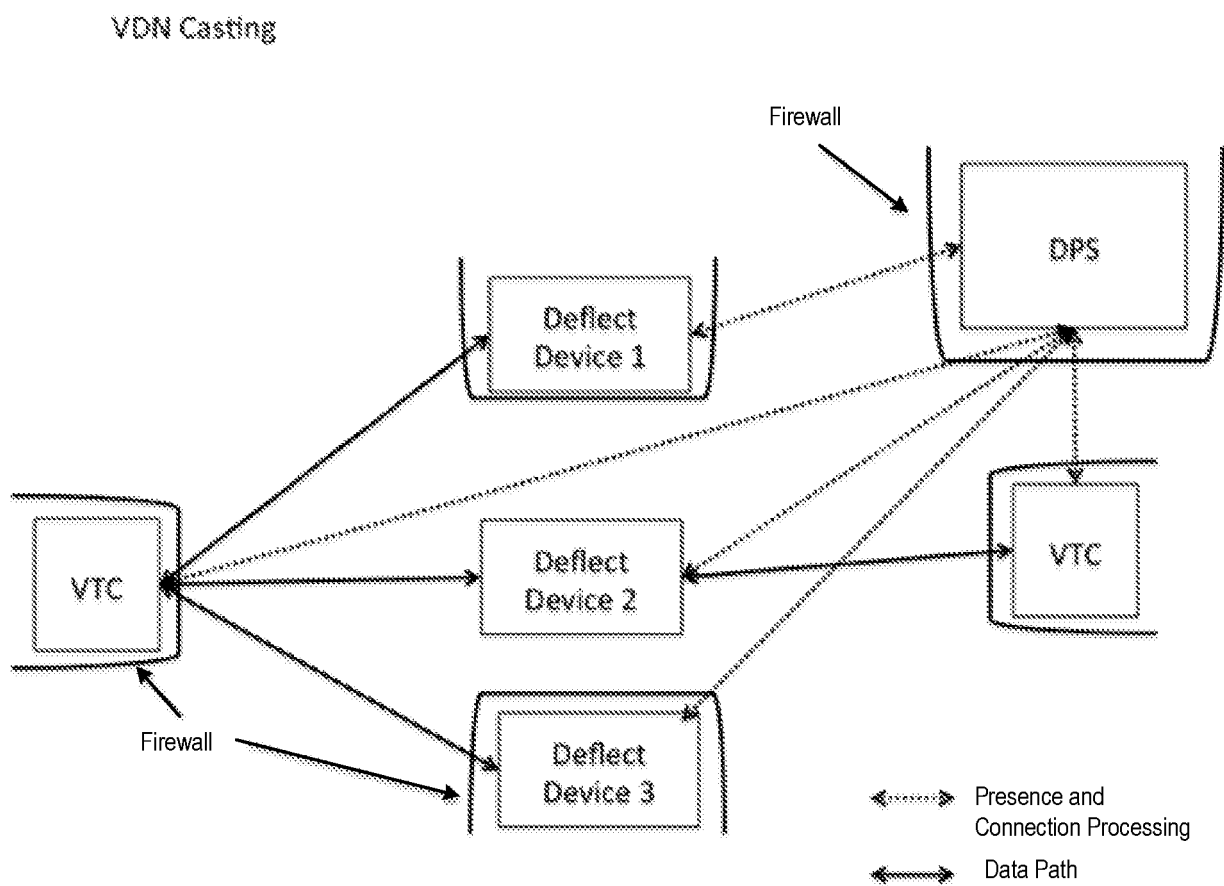


TCP -- Transmission Control Protocol
UDP -- User Datagram Protocol
SCTP -- Stream Control Transmission Protocol
SPX -- Sequenced Packet Exchange
IPX - Internetwork Packet Exchange
DCCP - Datagram Congestion Control Protocol

FIG. 35

**FIG. 36**

**FIG. 37**

**FIG. 38**

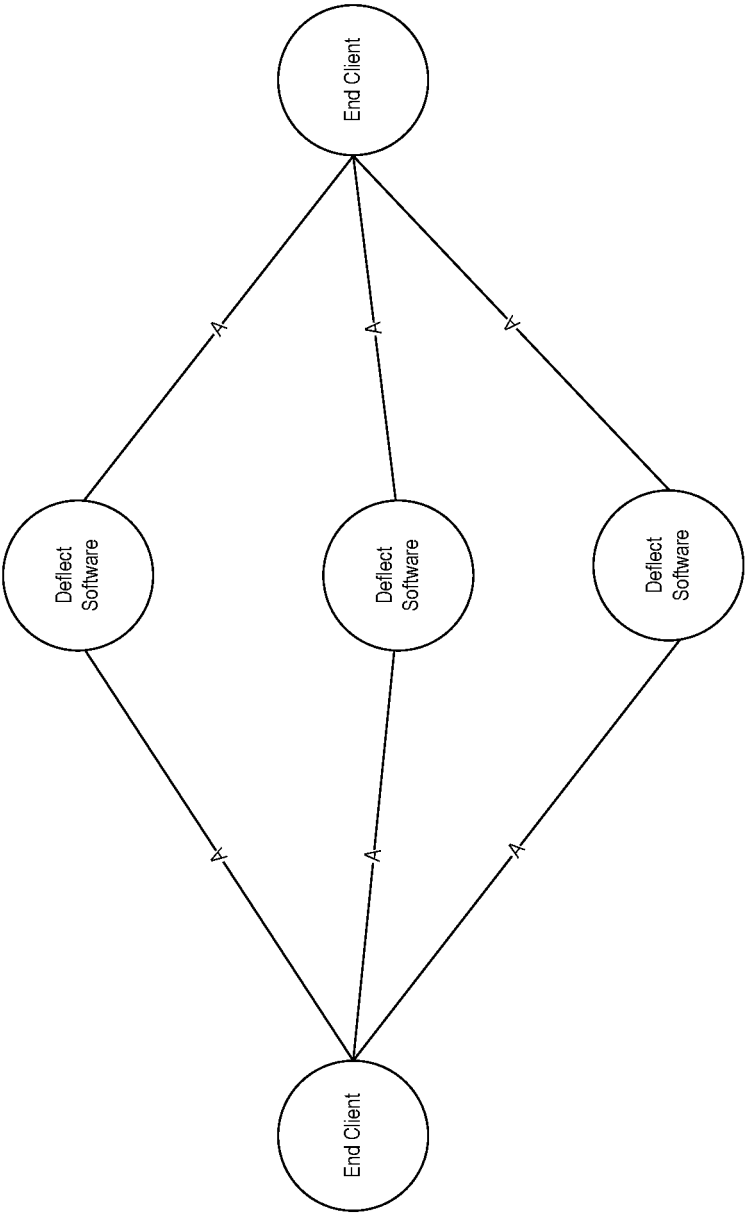


FIG. 39

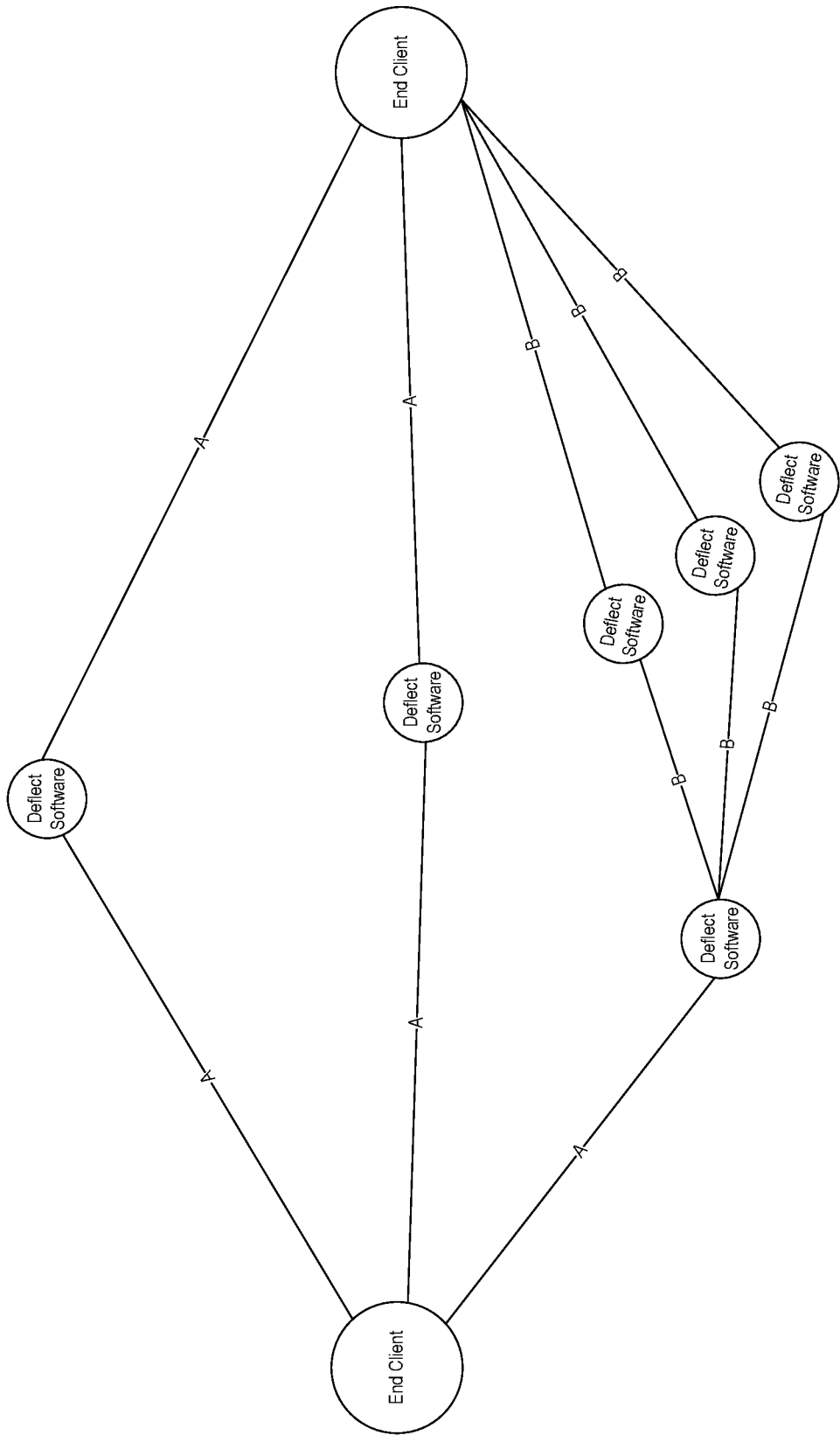


FIG. 40

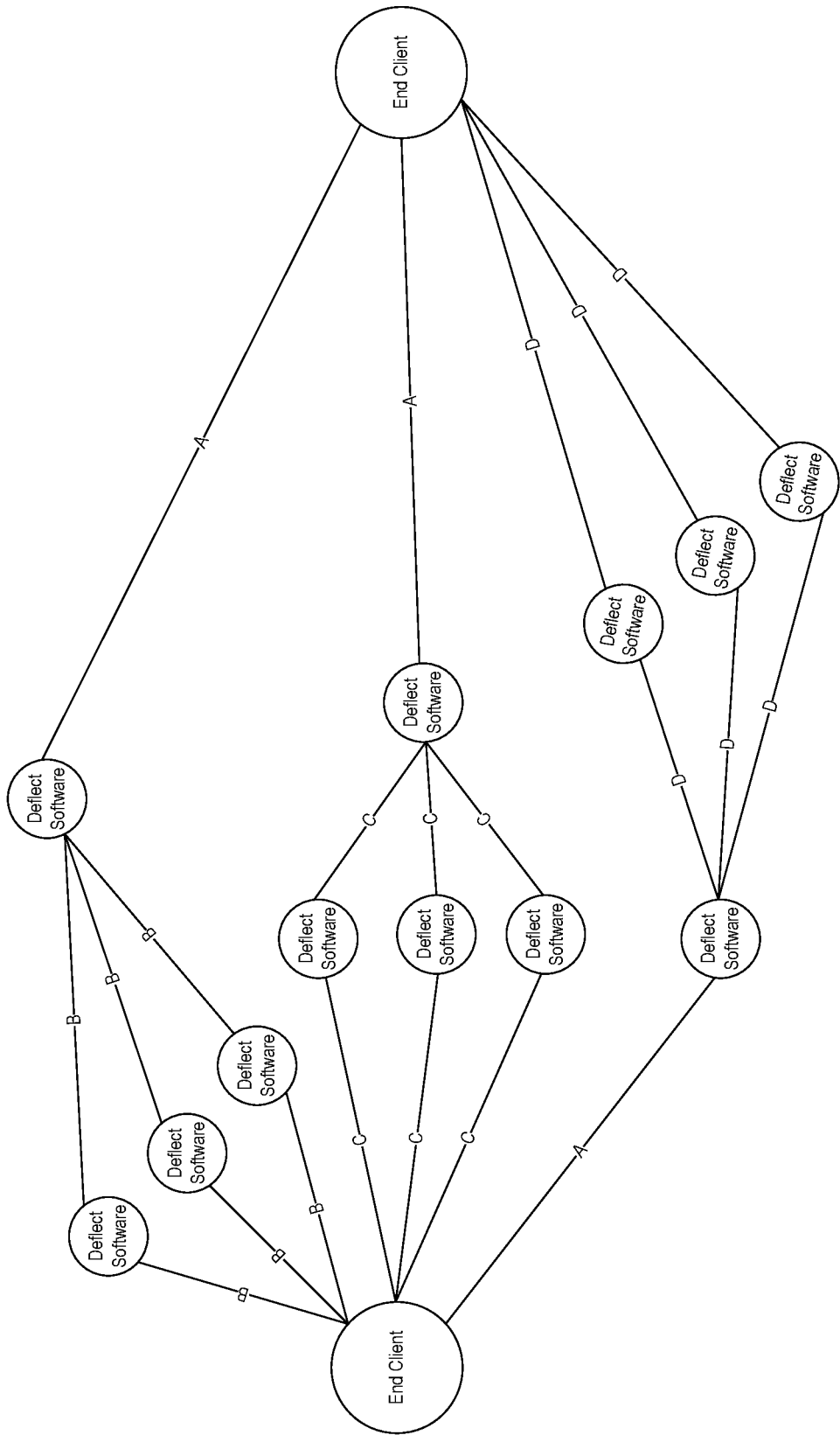


FIG. 41

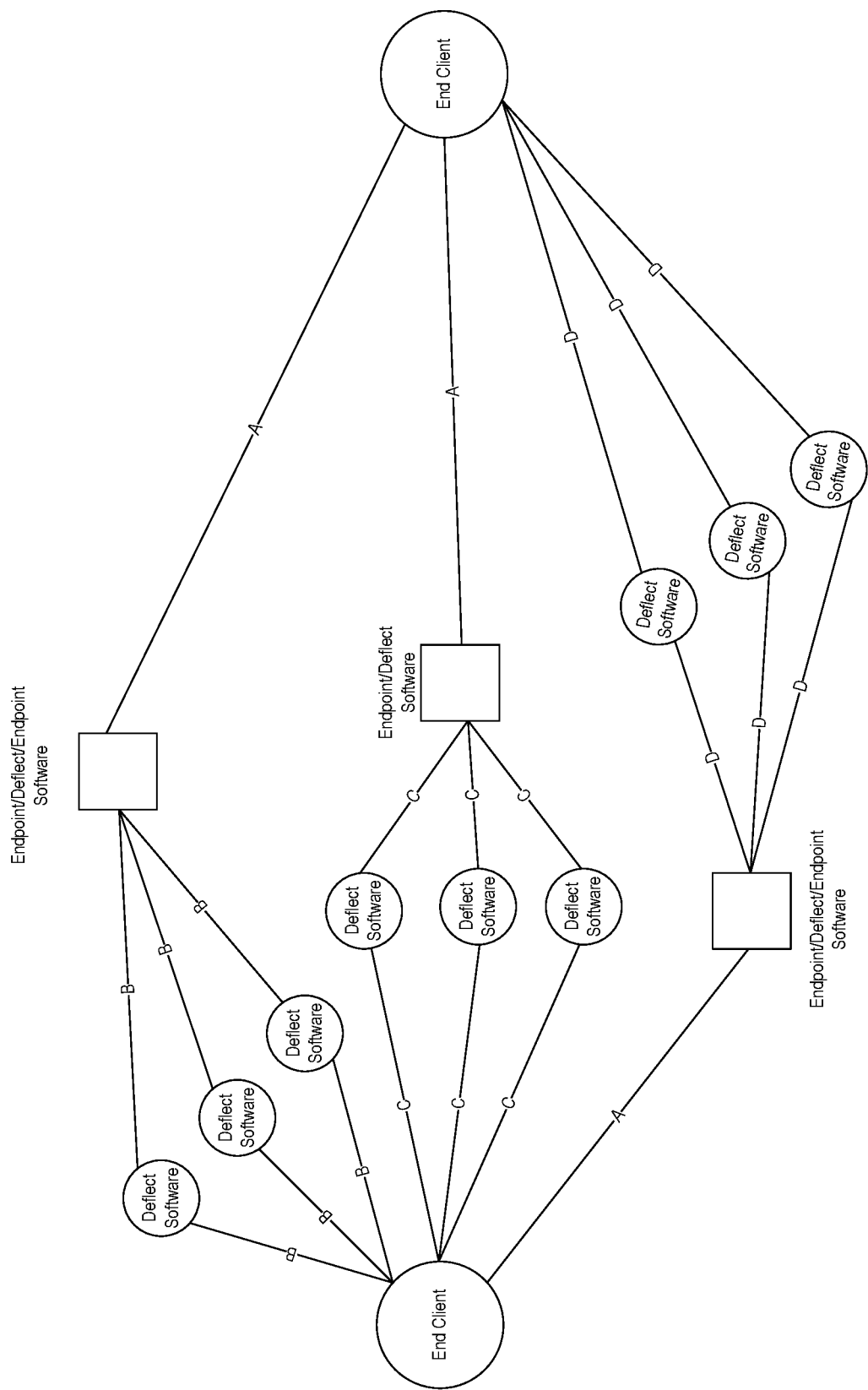


FIG. 42

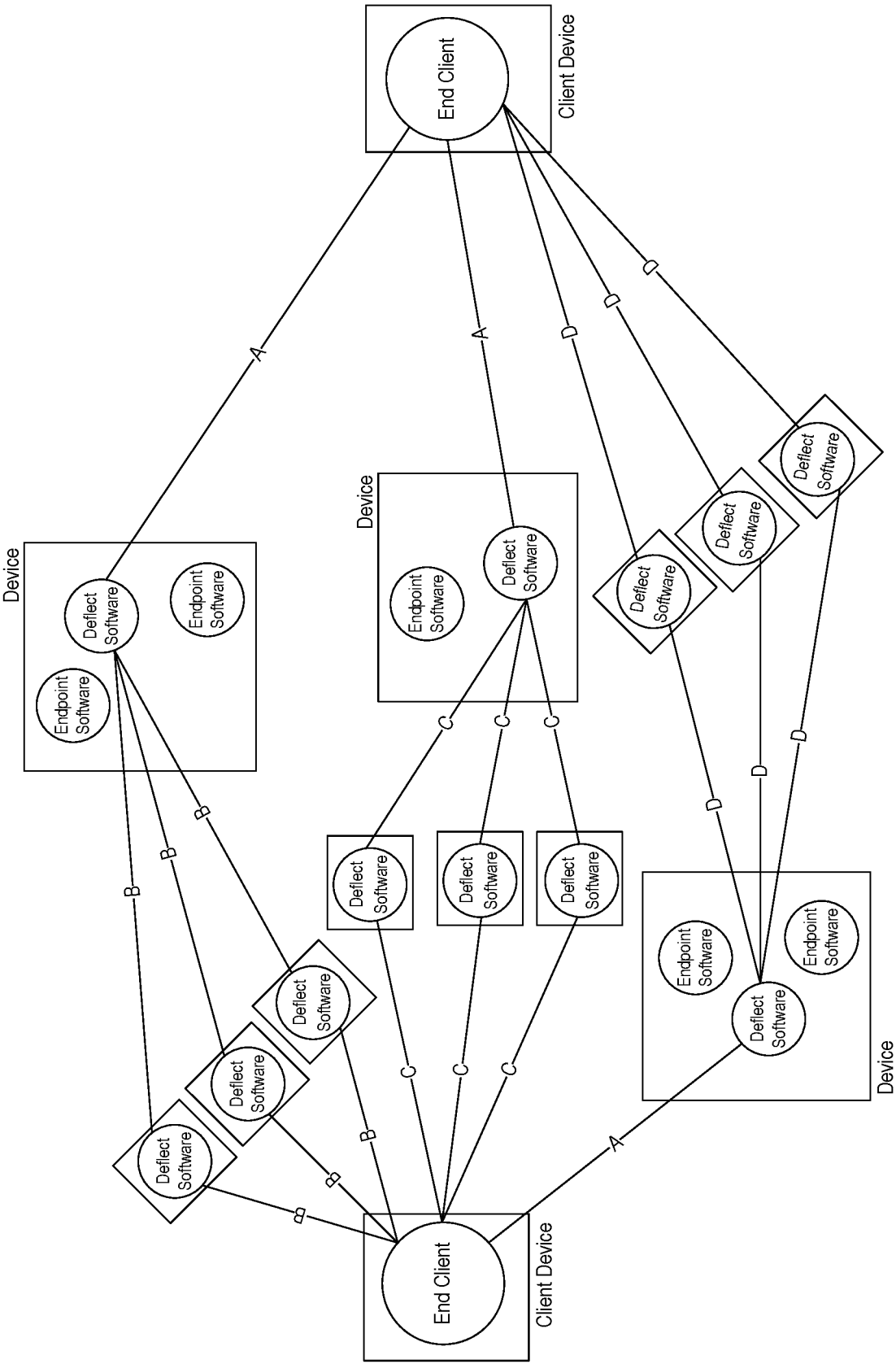


FIG. 43

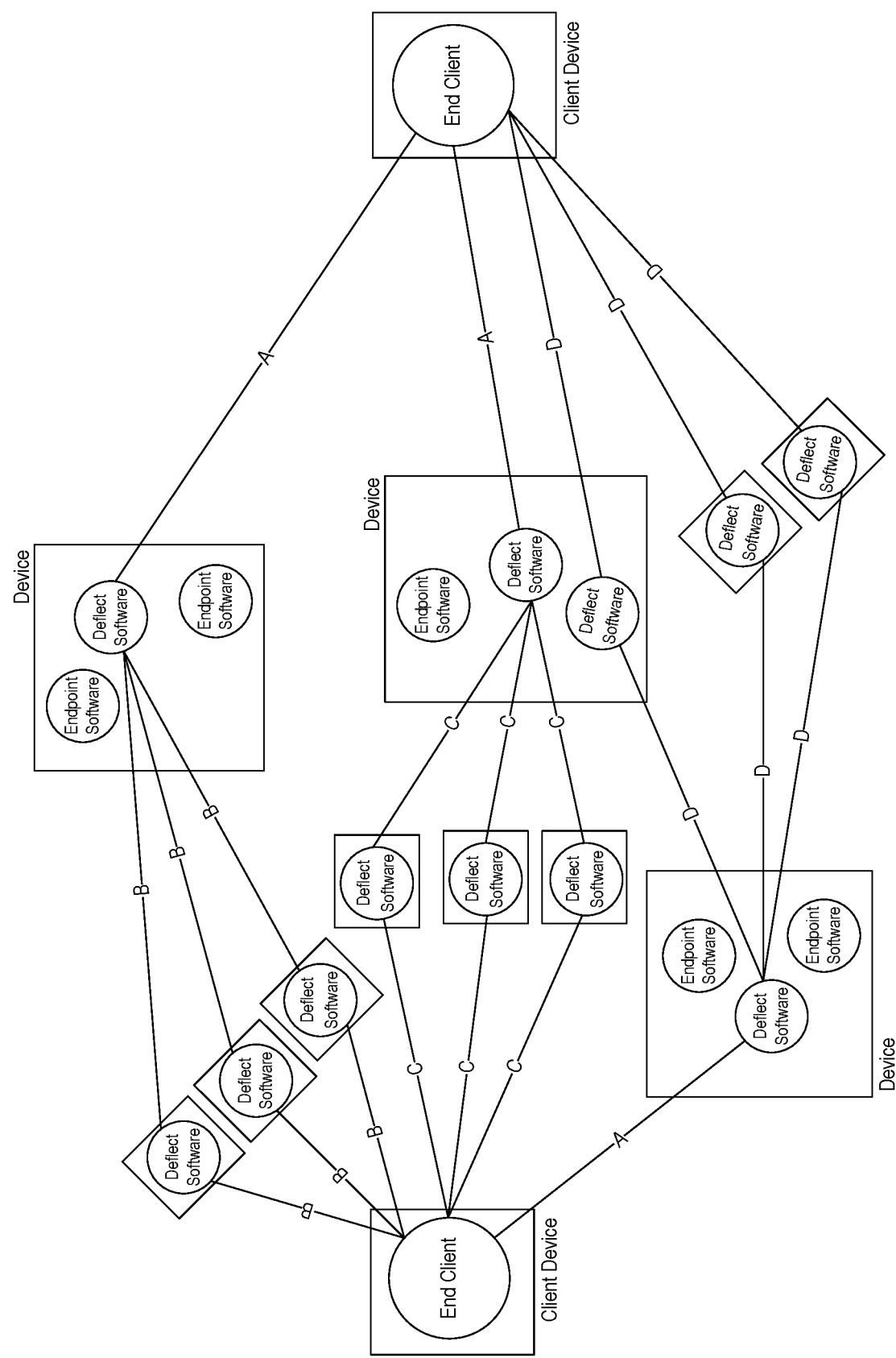


FIG. 44

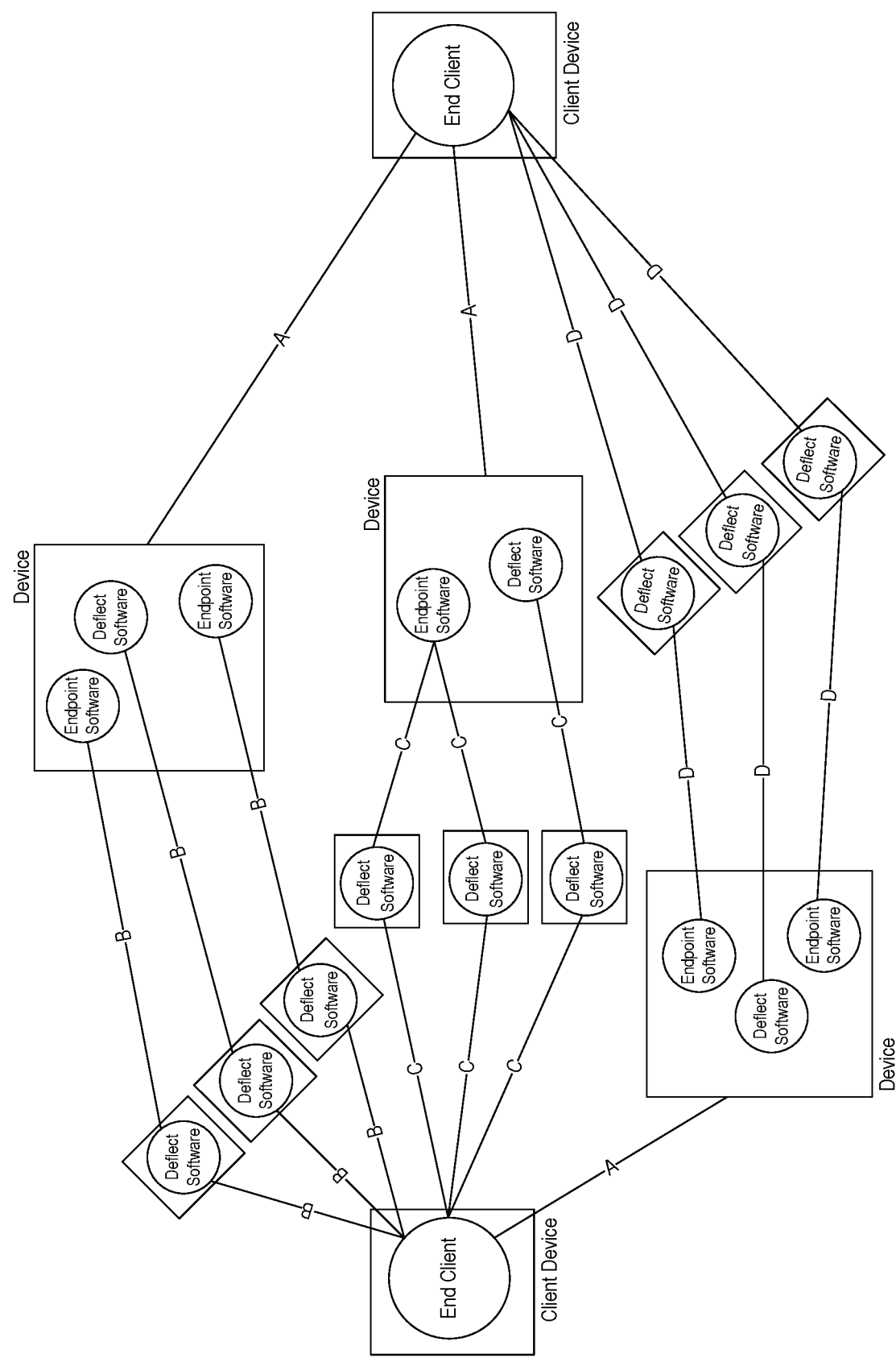


FIG. 45

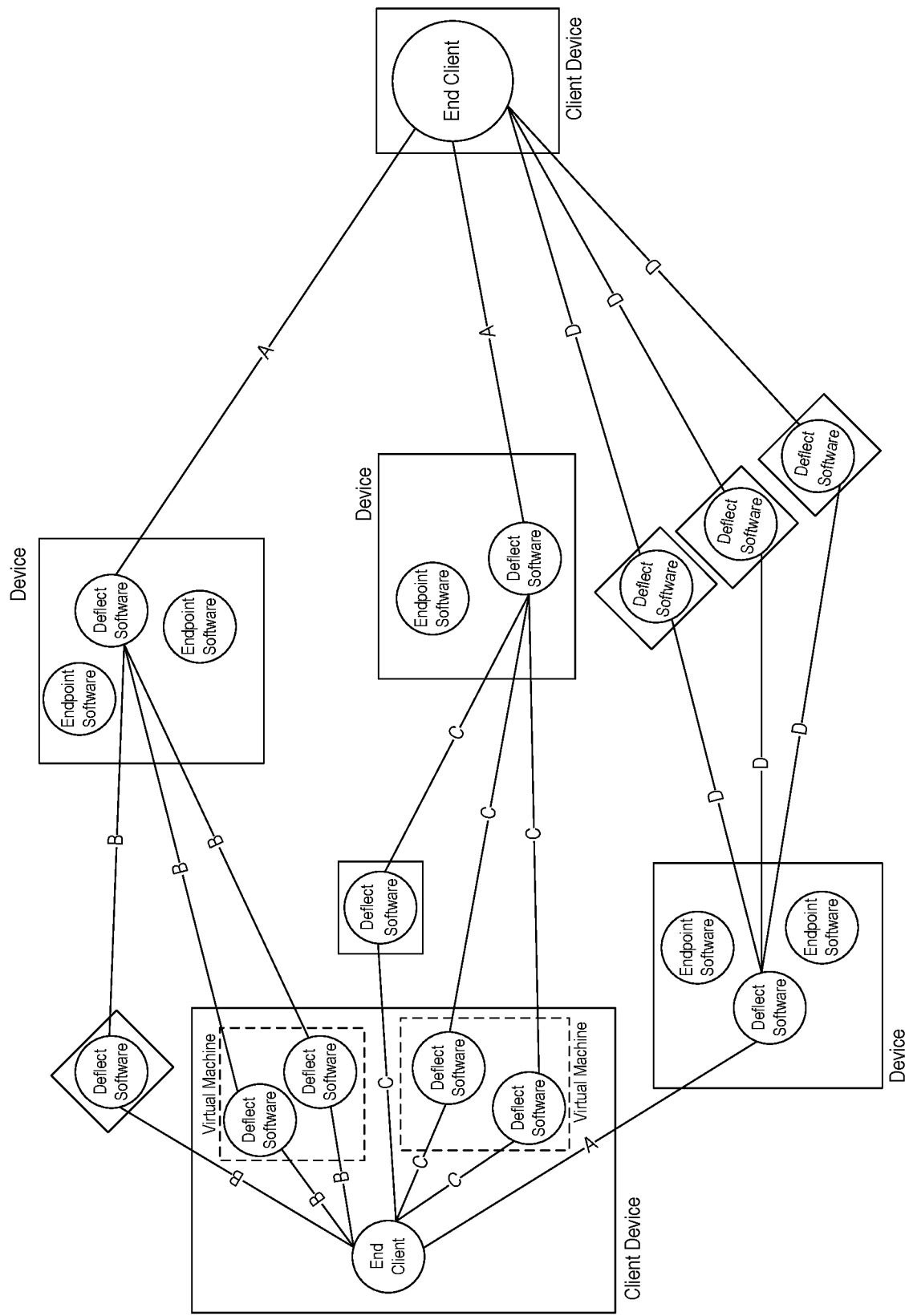


FIG. 46

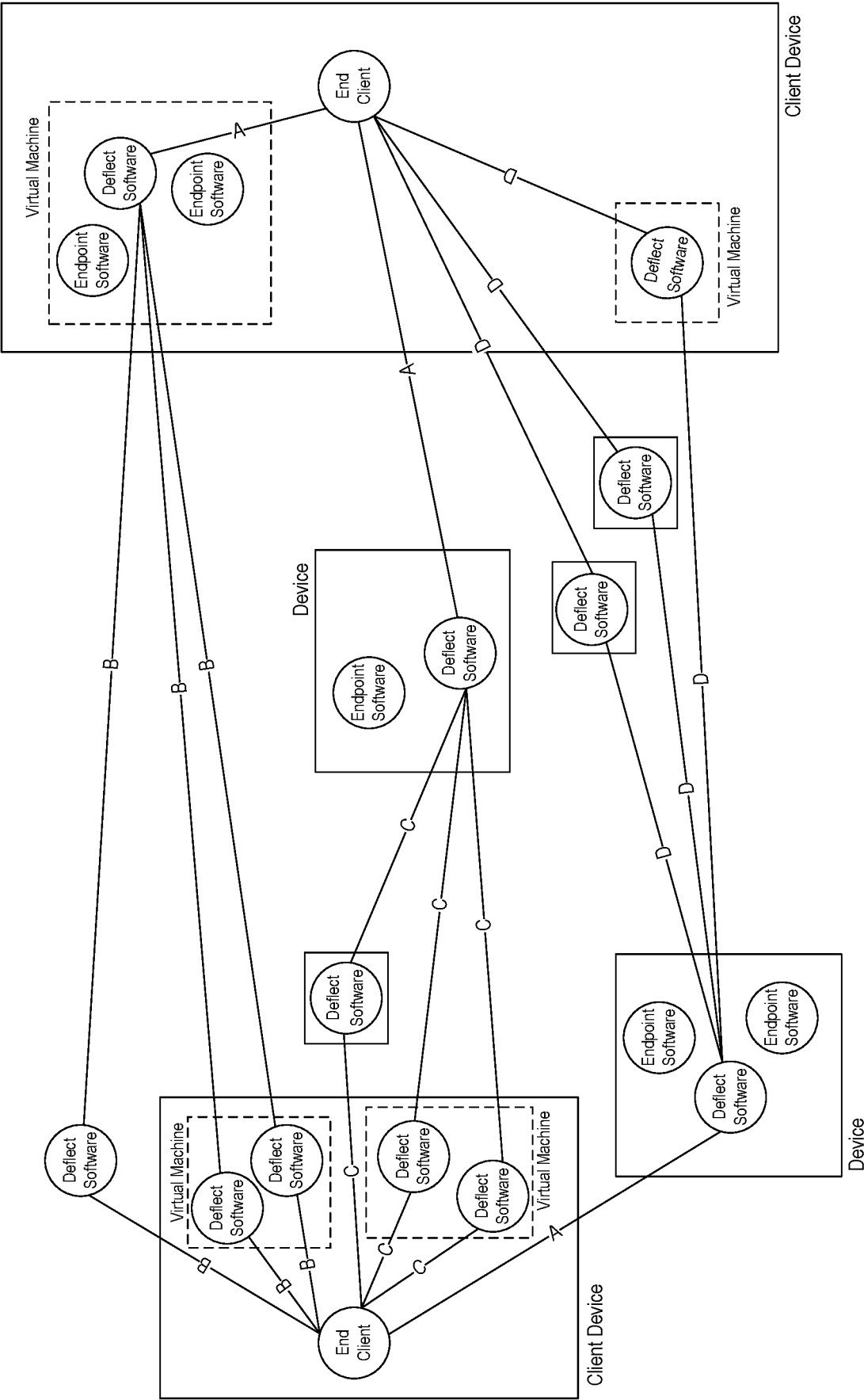


FIG. 47