

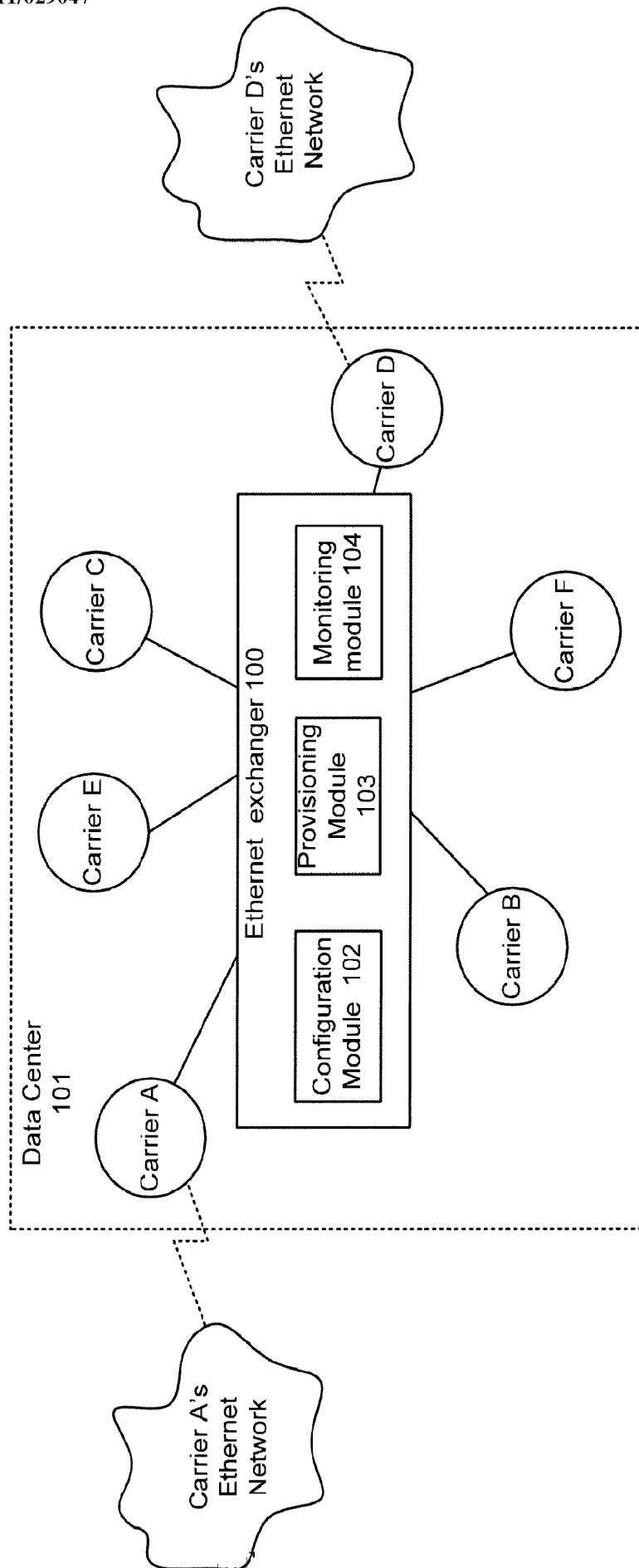


FIG. 1A

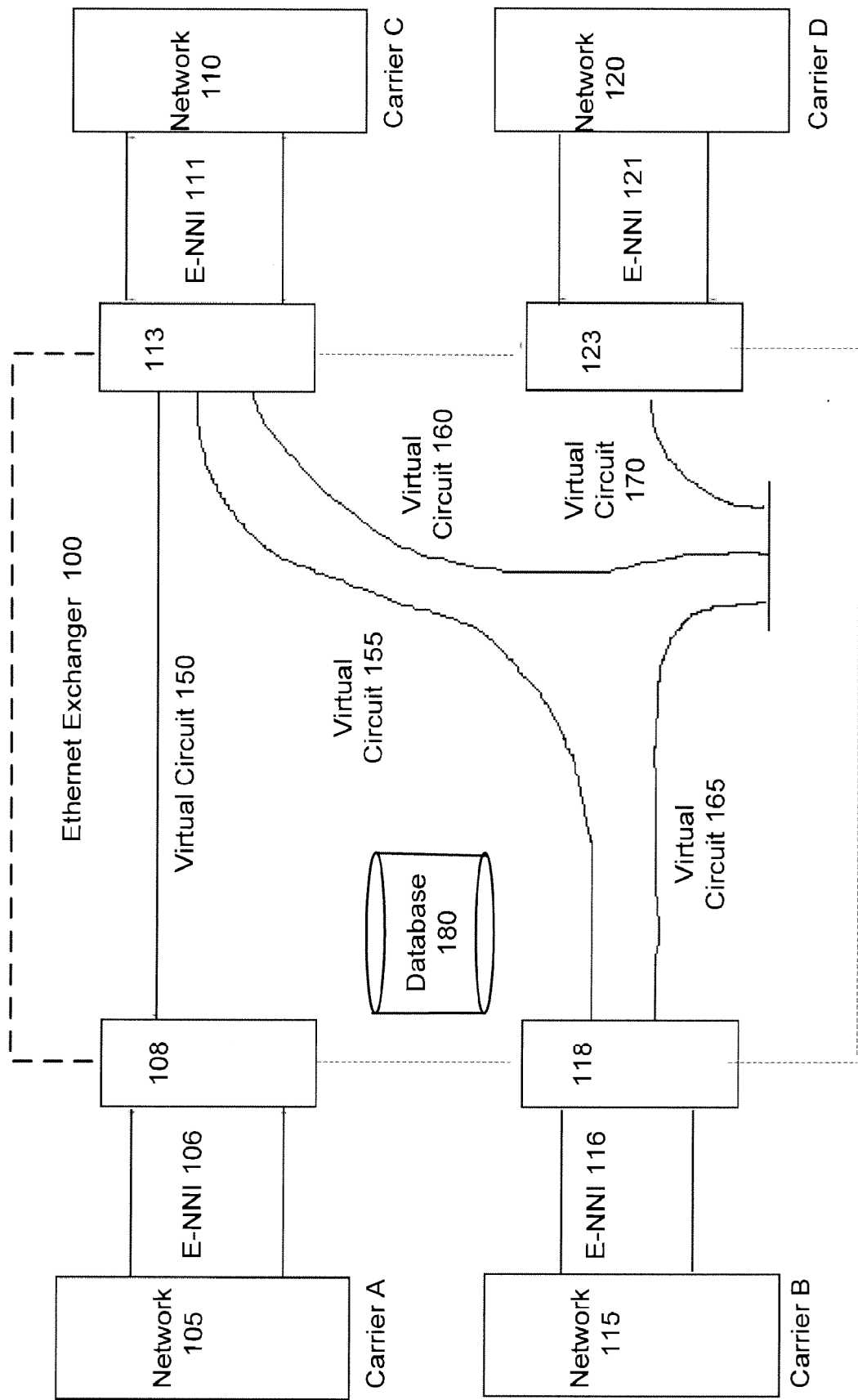


FIG. 1B

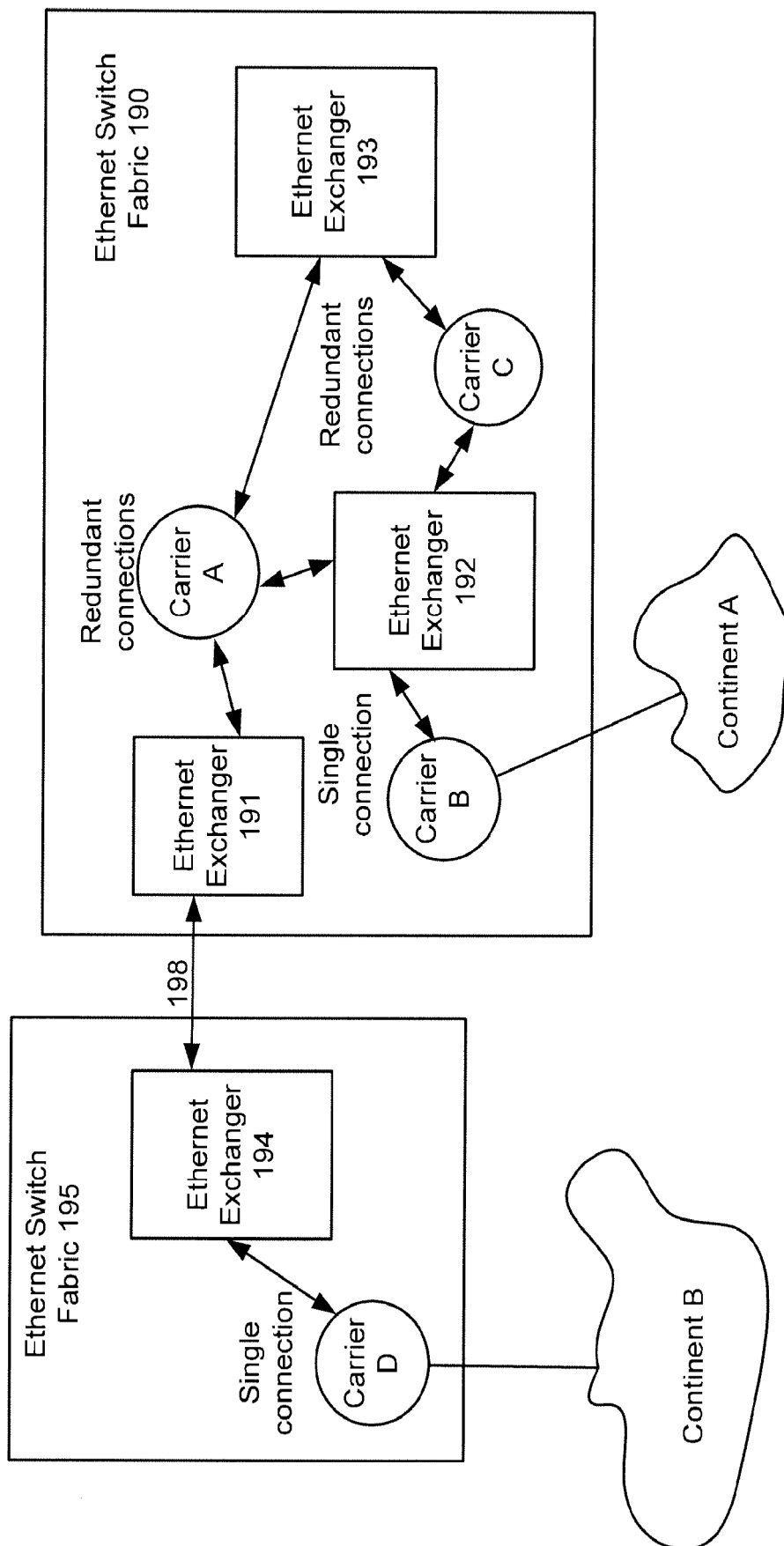


FIG. 1C

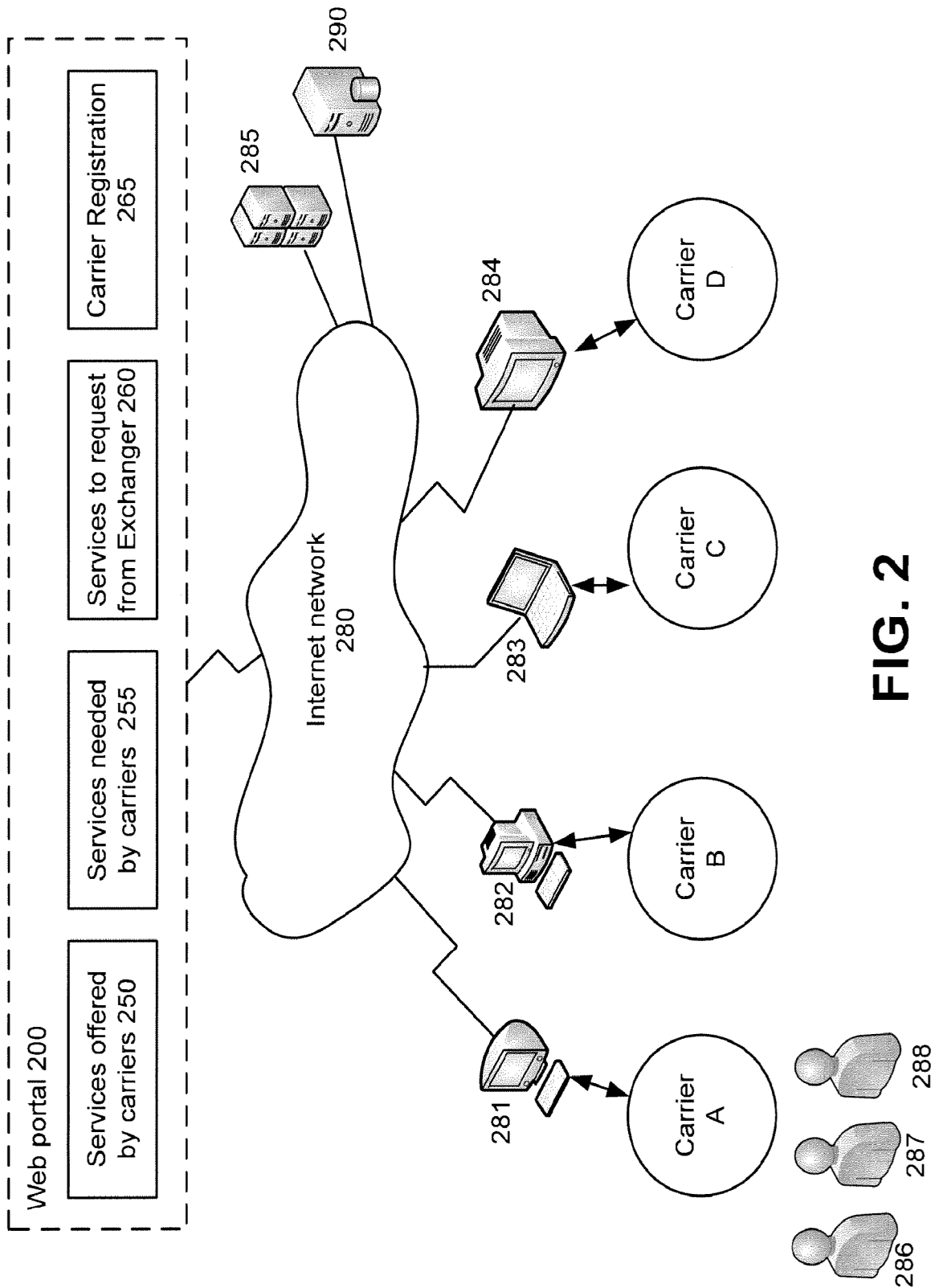
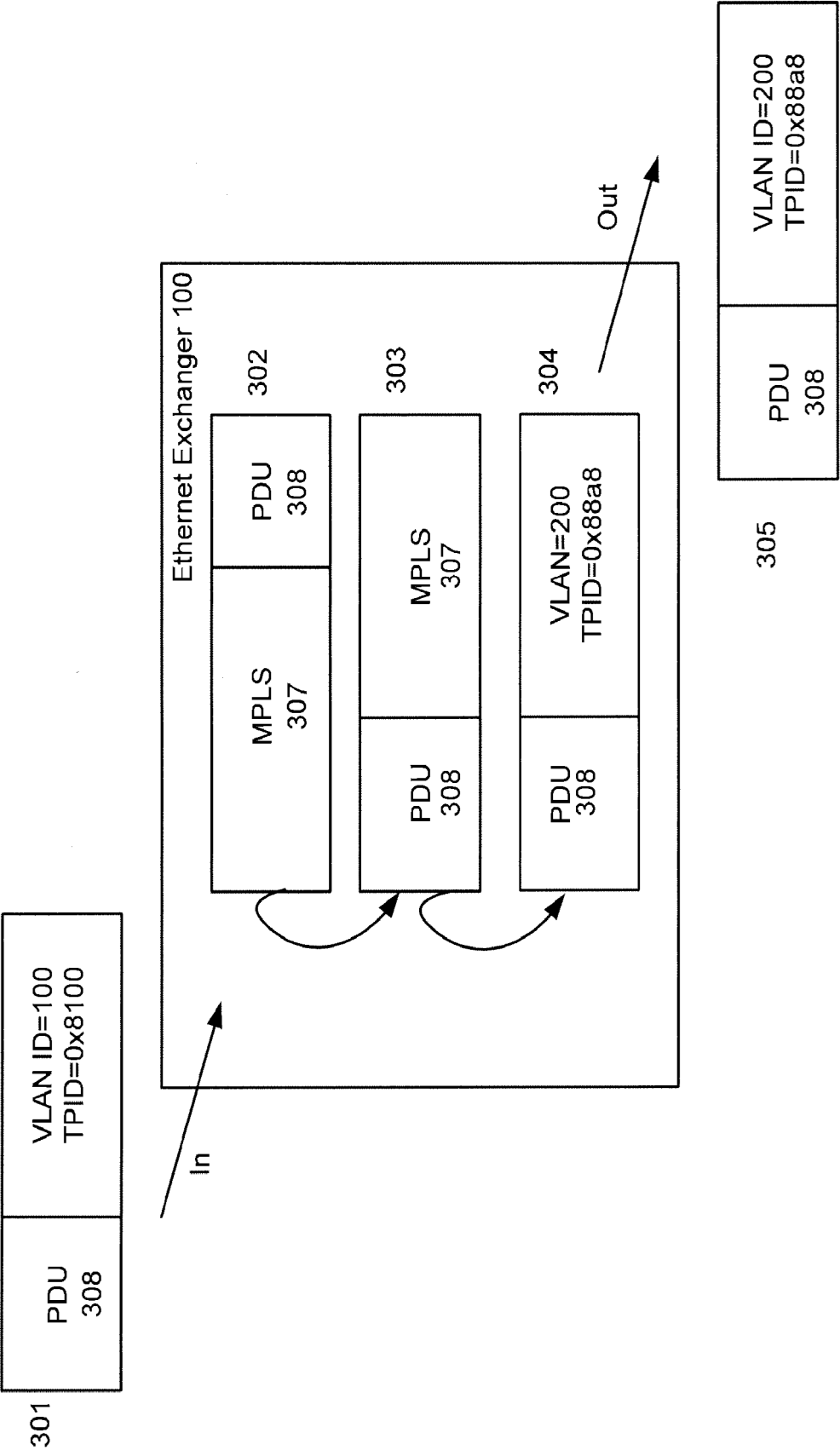


FIG. 2

FIG. 3A



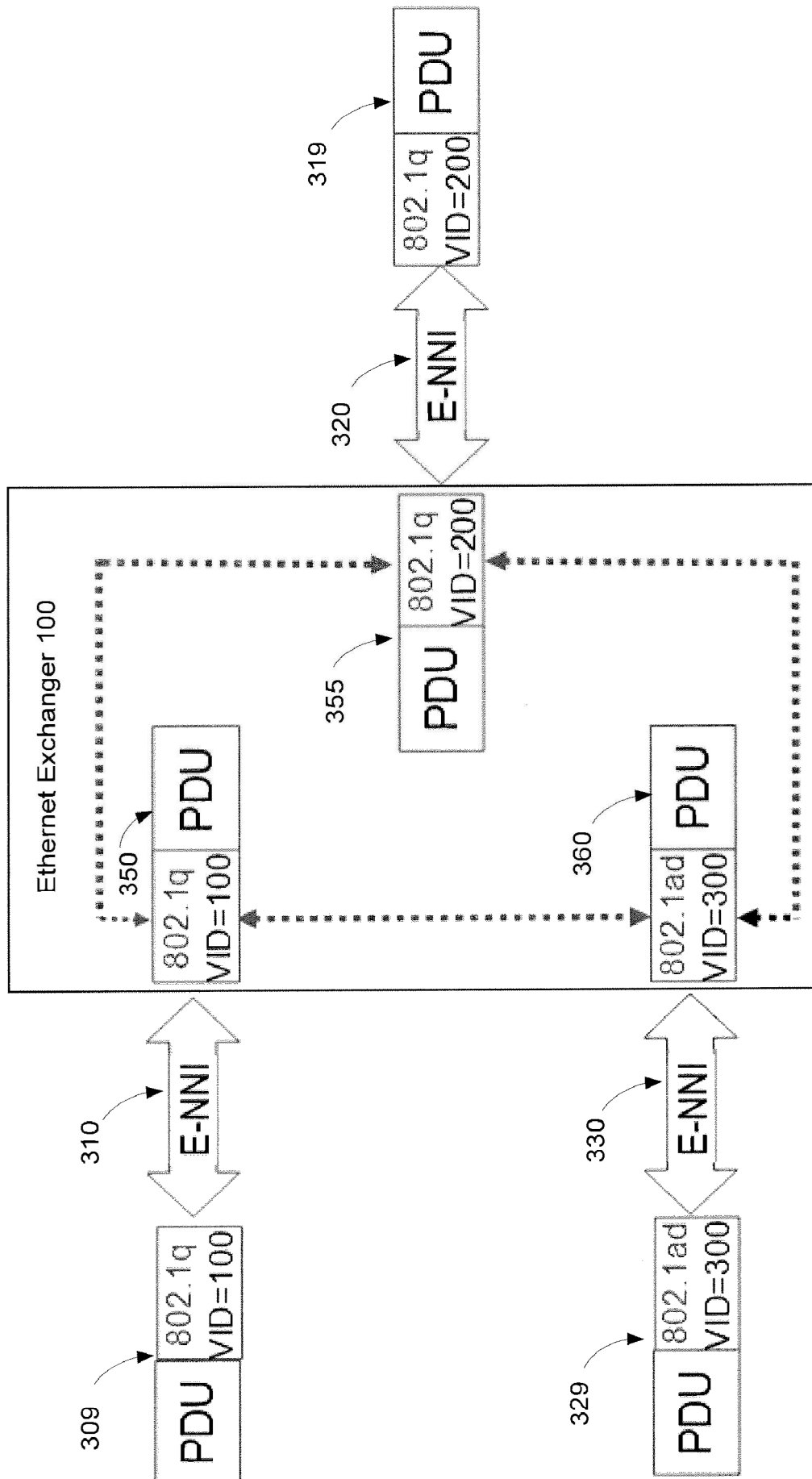
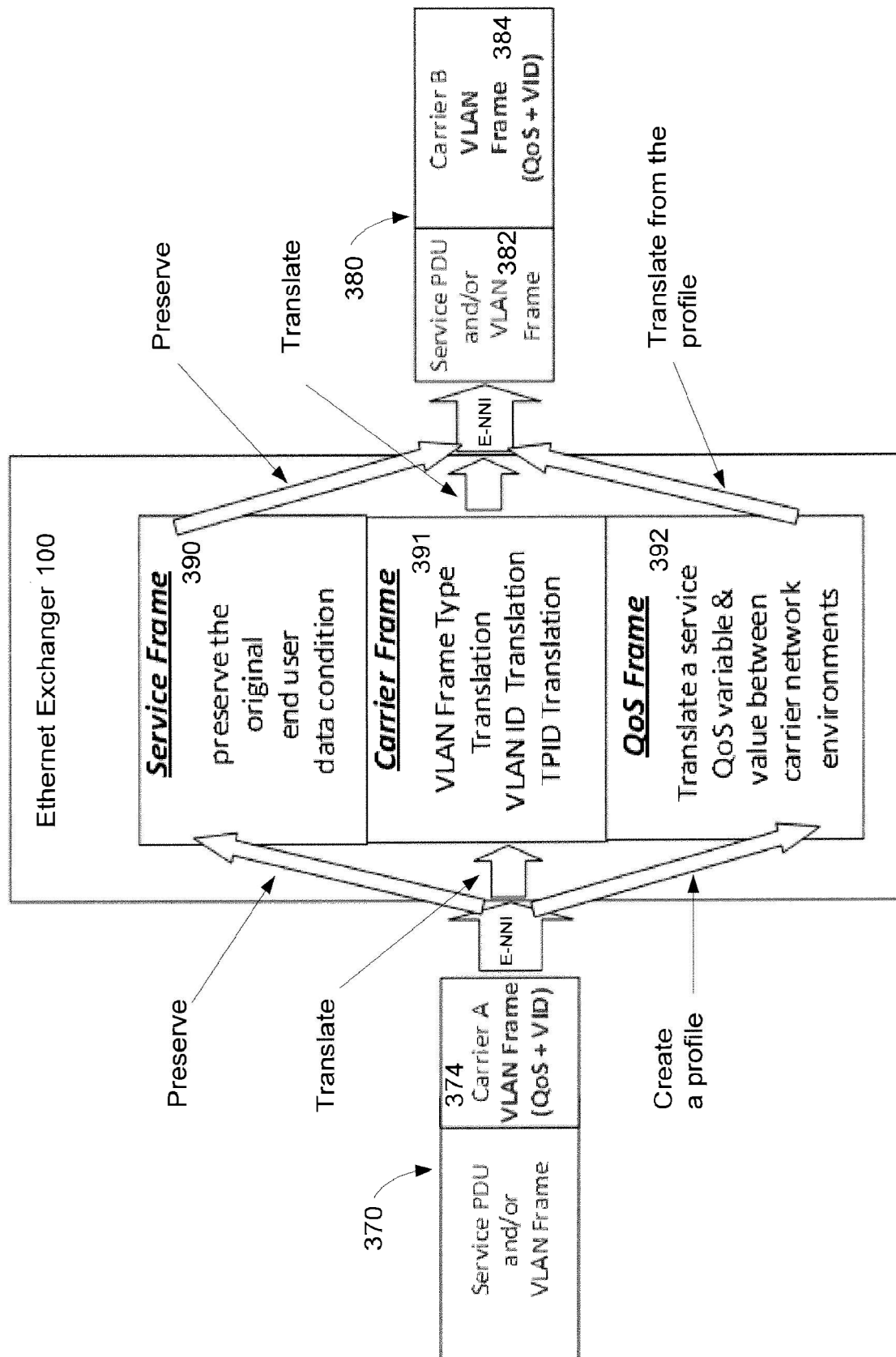


FIG. 3B

**FIG. 3C**

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Service Provider (end-to-end service owner) Bandwidth Control Method					
	CIR	Aggregate (CIR+PIR)	Fixed (CIR+PIR)	Aggregate, Per Q CIR	Fixed, Per Q CIR
CIR	CIR to CIR	Aggregate (CIR+PIR) to CIR	Aggregate (CIR+PIR) to CIR	Aggregate bandwidth to CIR	Aggregate bandwidth to CIR
Aggregate (CIR+PIR)	CIR to CIR	CIR to CIR, PIR to PIR	CIR to CIR, PIR to PIR	Aggregate bandwidth to CIR	Aggregate bandwidth to CIR
Fixed (CIR+PIR)	CIR to CIR	CIR to CIR, PIR to PIR	CIR to CIR, PIR to PIR	Aggregate bandwidth to CIR	Aggregate bandwidth to CIR
Aggregate, Per Queue CIR	CIR to Highest Queue or one of Queues	CIR to highest Q, PIR to lowest Q	CIR to highest Q, PIR to lowest Q	Queue on Queue (s) map	Queue on Queue (s) map
Fixed, Per Queue CIR	CIR to Highest Queue or one of Queues	CIR to highest Q, PIR to lowest Q	CIR to highest Q, PIR to lowest Q	Queue on Queue (s) map	Queue on Queue (s) map

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FIG. 3D

Service Provider (SP, end-to-end service owner) QoS Variable					
802.1p bits on 802.1q Frame	Outer VLAN of 802.1p bits on 802.1ad Frame	Outer/Inner VLANs of 802.1p bits on 802.1ad Frame	IP TOS, DSCP/IPP bits	Policy based method	
EQ/SO maps 802.1p bits to SP's 802.1p bits	EQ/SO maps 802.1p bits to SP's outer 802.1p bits	EQ/SO maps 802.1p bits to SP's outer 802.1p bits	EQ/SO translates SP's IP TOS bits to 802.1p bits	EQ/SO translates SP's policy to 802.1p bits	802.1p bits on 802.1q Frame
EQ/SO maps SP's 802.1p bits to outer VLAN 802.1p bits	EQ/SO maps 802.1p bits to SP's outer 802.1p bits	EQ/SO maps outer VLAN of 802.1p bits to SP's outer 802.1p bits	EQ/SO translates SP's IP TOS bits to outer VLAN of 802.1p bits	EQ/SO translates SP's policy to outer VLAN of 802.1p bits	Outer VLAN of 802.1p bits on 802.1ad Frame
EQ/SO maps SP's 802.1p bits to outer VLAN 802.1p bits	EQ/SO maps outer VLAN 802.1p bits to SP's outer 802.1p bits	EQ/SO maps outer/inner VLANs of 802.1p bits to SP's outer/inner VLANs of 802.1p bits	EQ/SO translates SP's IP TOS bits to outer VLAN of 802.1p bits	EQ/SO translates SP's policy to outer VLAN of 802.1p bits	Outer/Inner VLANs of 802.1p bits on 802.1ad Frame
EQ/SO translates SP's 802.1p bits to IP TOS values	EQ/SO translates SP's outer VLAN 802.1p bits to IP TOS values	EQ/SO translates SP's outer VLAN 802.1p bits to IP TOS values	EQ/SO maps SP's IP TOS bits to IP TOS bits	EQ/SO translates SP's policy to IP TOS bits	IP TOS, DSCP/IPP bits
EQ/SO translates SP's 802.1p bits to policy	EQ/SO translates SP's outer VLAN 802.1p bits to policy	EQ/SO translates SP's outer VLAN 802.1p bits to policy	EQ/SO maps SP's IP TOS bits to policy	EQ/SO translates SP's policy to policy	Policy based method

FIG. 3E

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Classification Example	6 CoS	5 CoS	4 CoS	3 CoS	2 CoS	1 CoS
Class 6 (Voice, EF)	6	5	4	3	2	
Class 5 (multimedia, AF4x)	5	4	3			
Class 4 (Critical Data, AF3x)	4	3		2	1	1
Class 3 (Preferred Data, AF2x)	3	2	2			
Class 2 (Business Data, AF1x)	2			1		
Class 1 (Best Effort, BE)	1	1	1			

Traffic Direction 

FIG. 4A

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1 CoS	2 CoS	3 CoS	4 CoS	5 CoS	6 CoS	Classification Example
1	2	3	4	5	6	Class 6 (Voice, EF)
	1	2	3	4	5	Class 5 (multimedia, AF4x)
			2	3	4	Class 4 (Critical Data, AF3x)
				2	3	Class 3 (Preferred Data, AF2x)
		1	1	1	2	Class 2 (Business Data, AF1x)
					1	Class 1 (Best Effort, BE)

Traffic Direction 

FIG. 4B

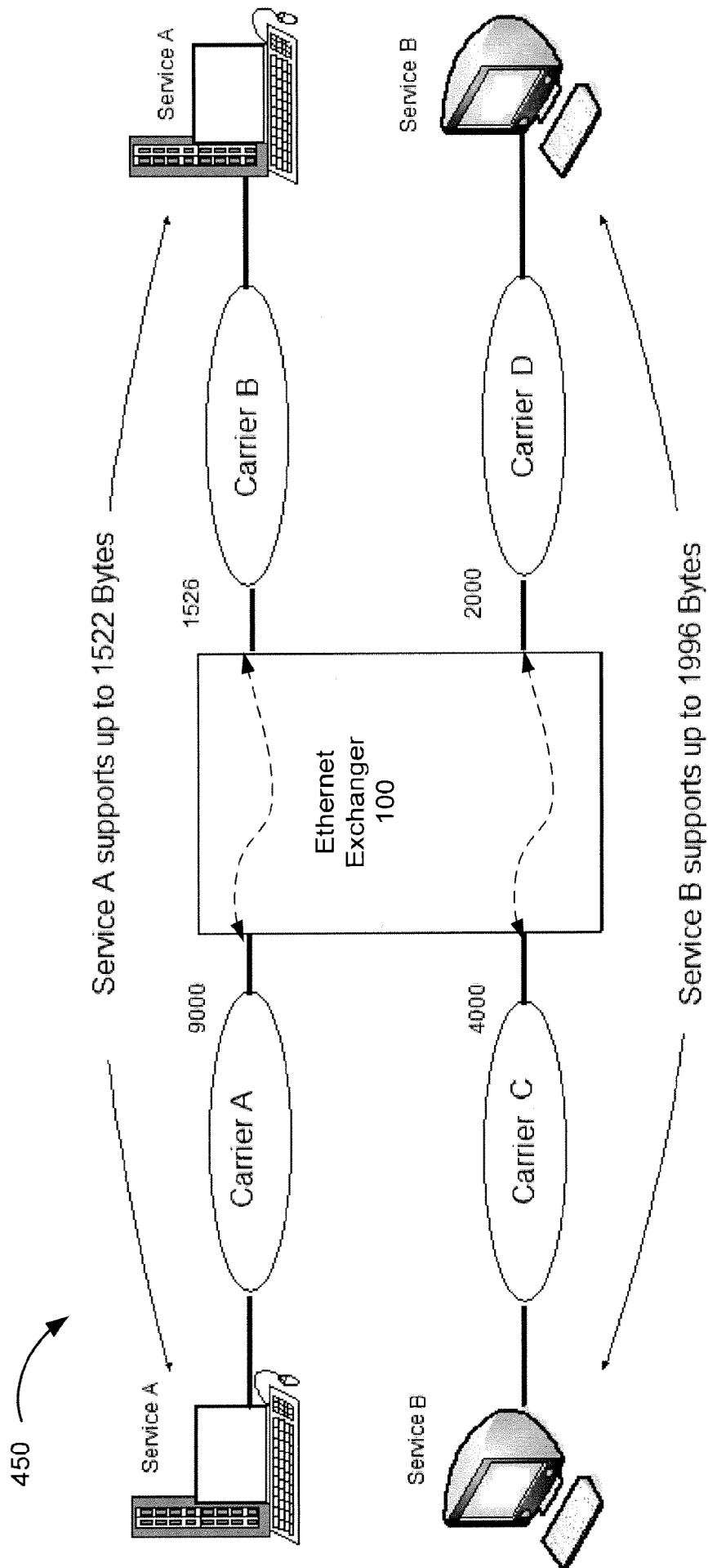


FIG. 4C

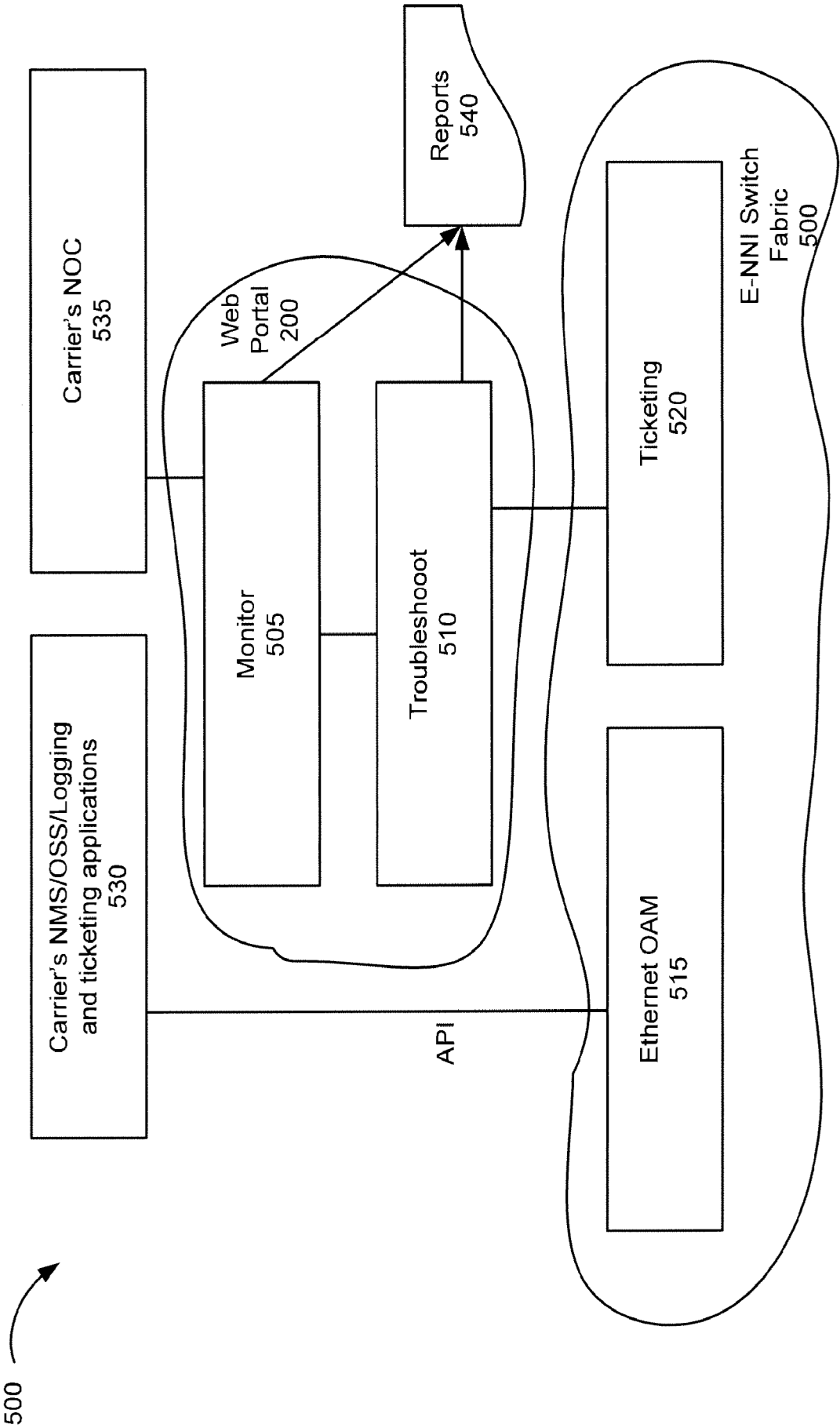
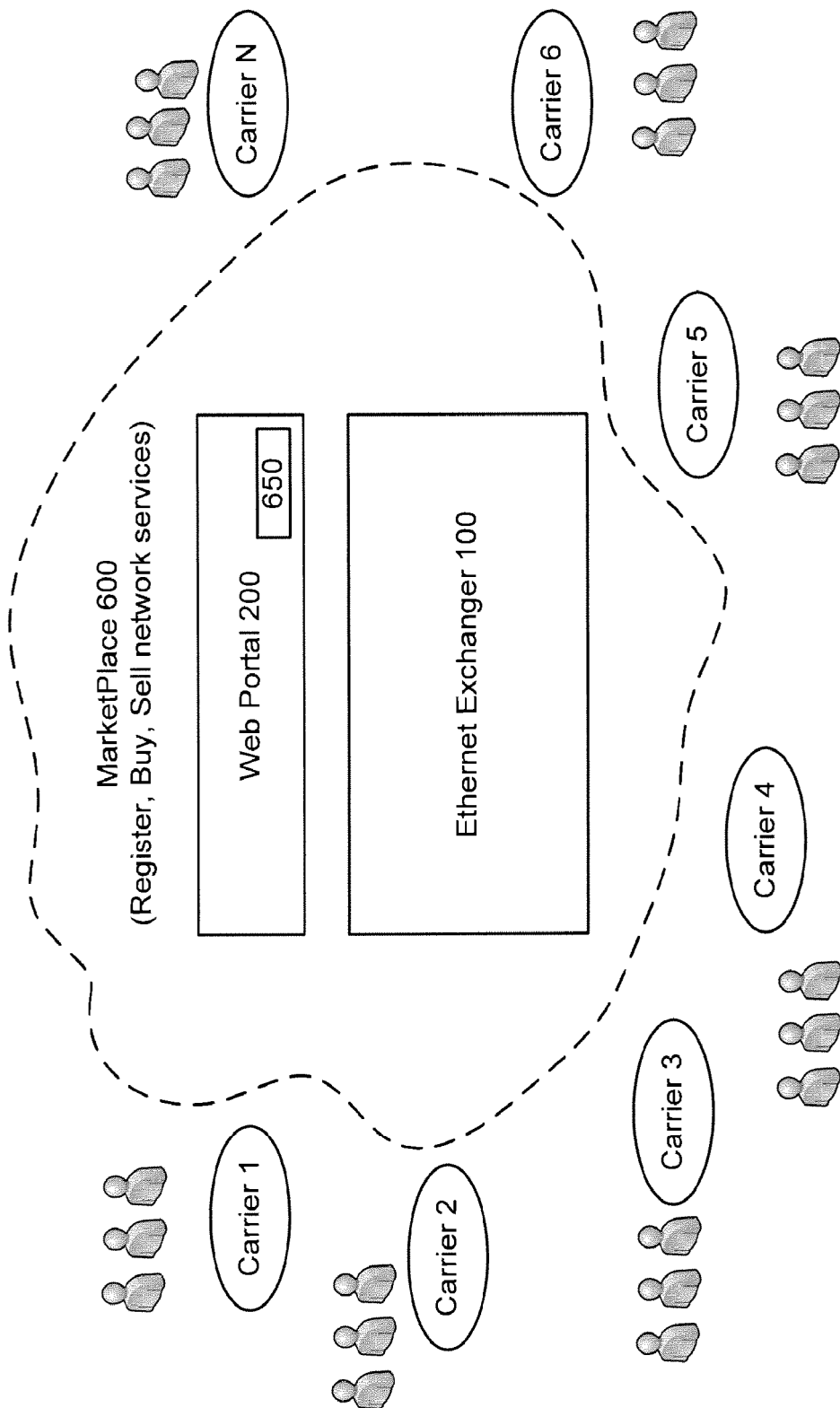
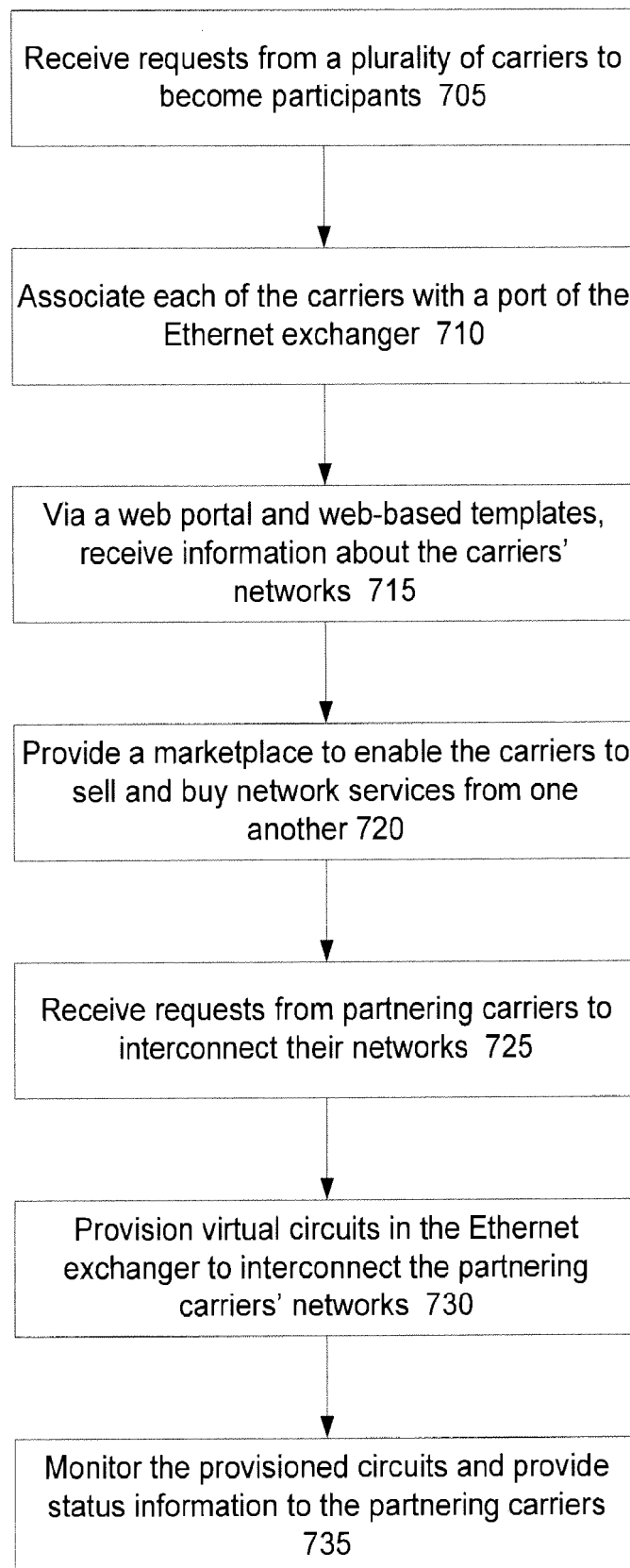
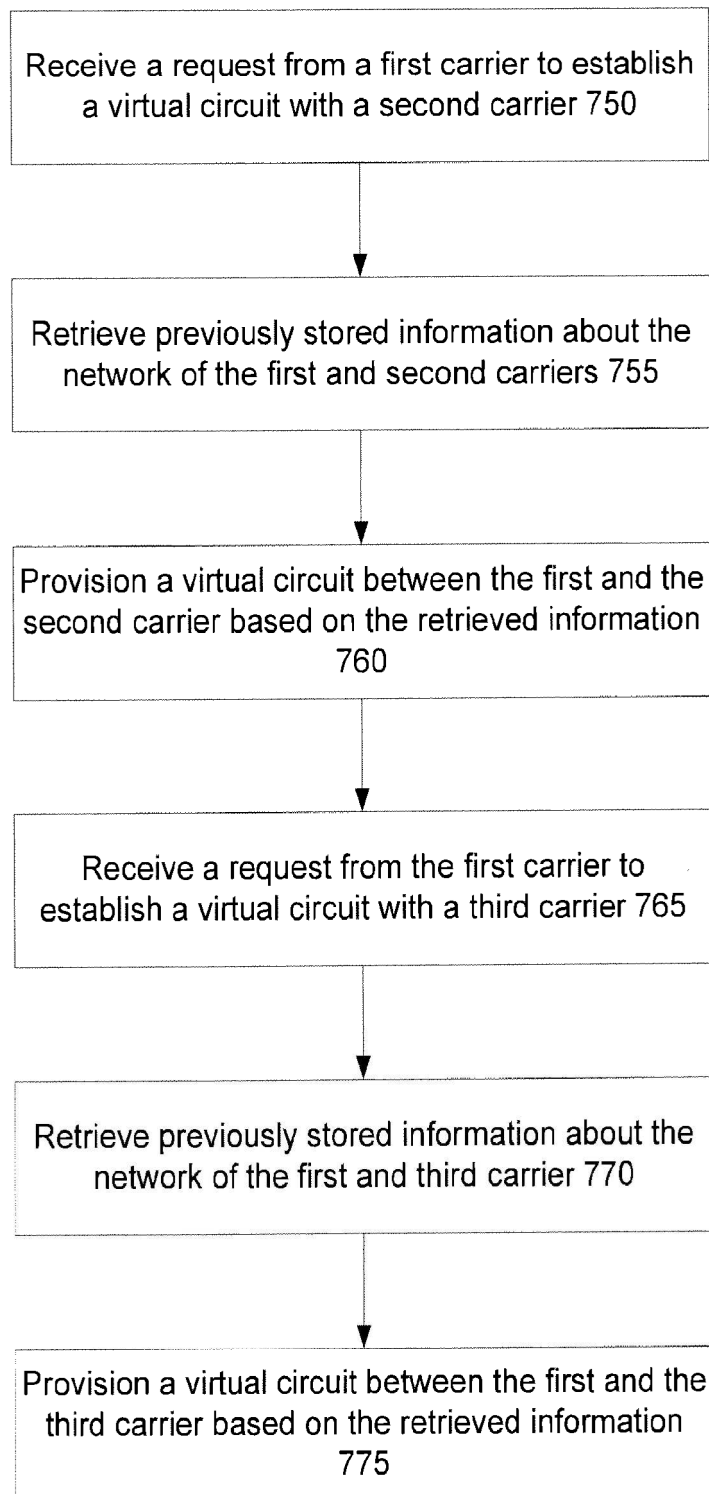


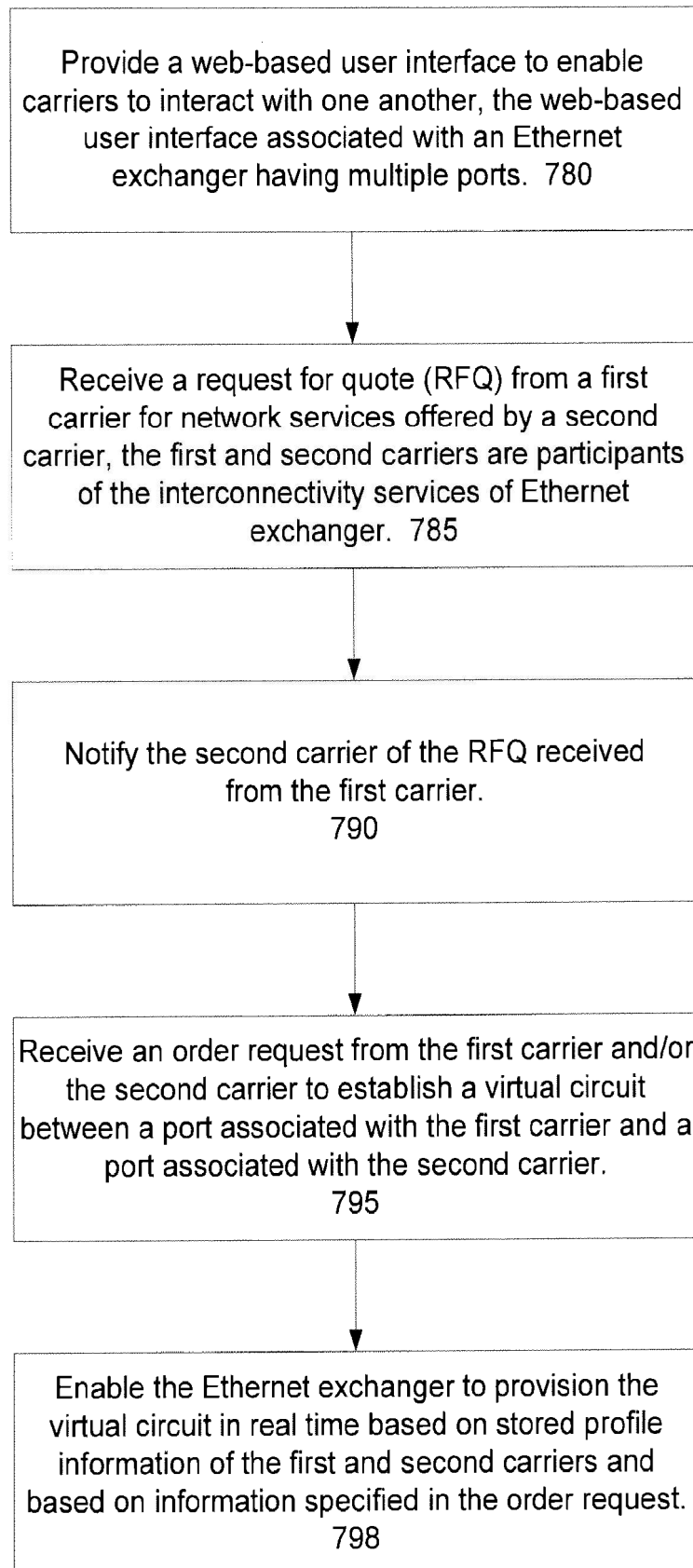
FIG. 5

FIG. 6



**FIG. 7A**

**FIG. 7B**

**FIG. 7C**

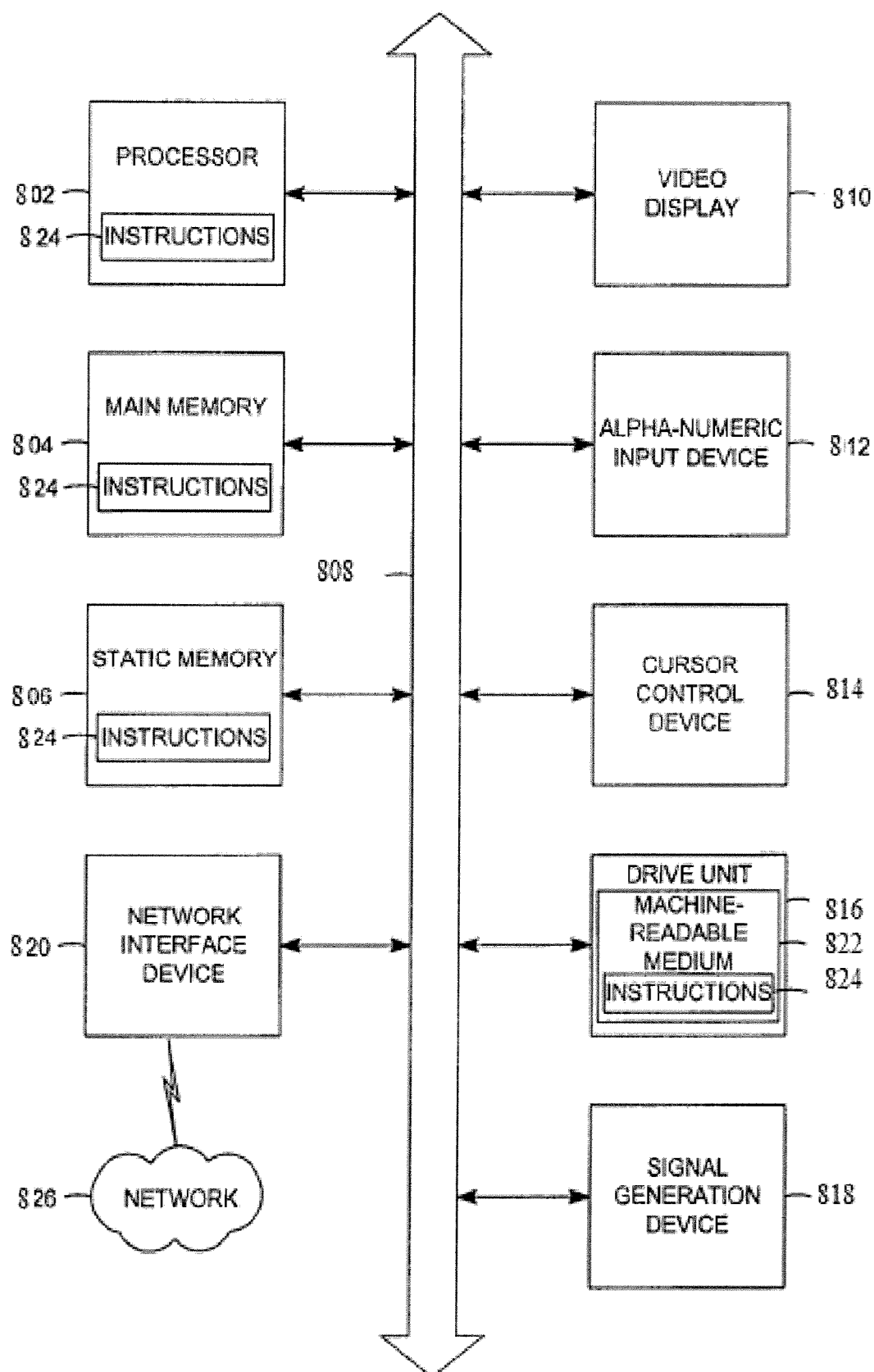
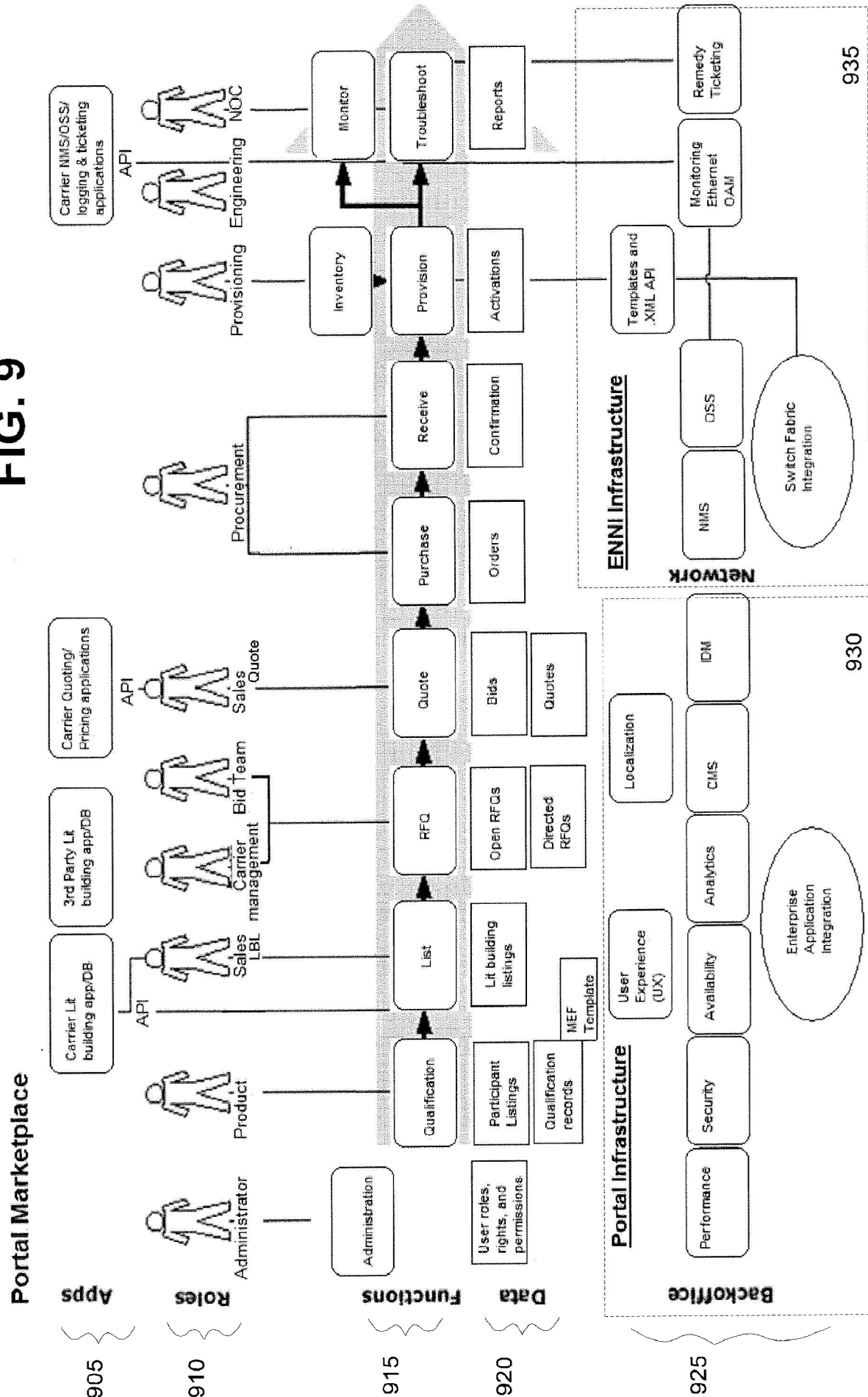
**FIG. 8**

FIG. 9



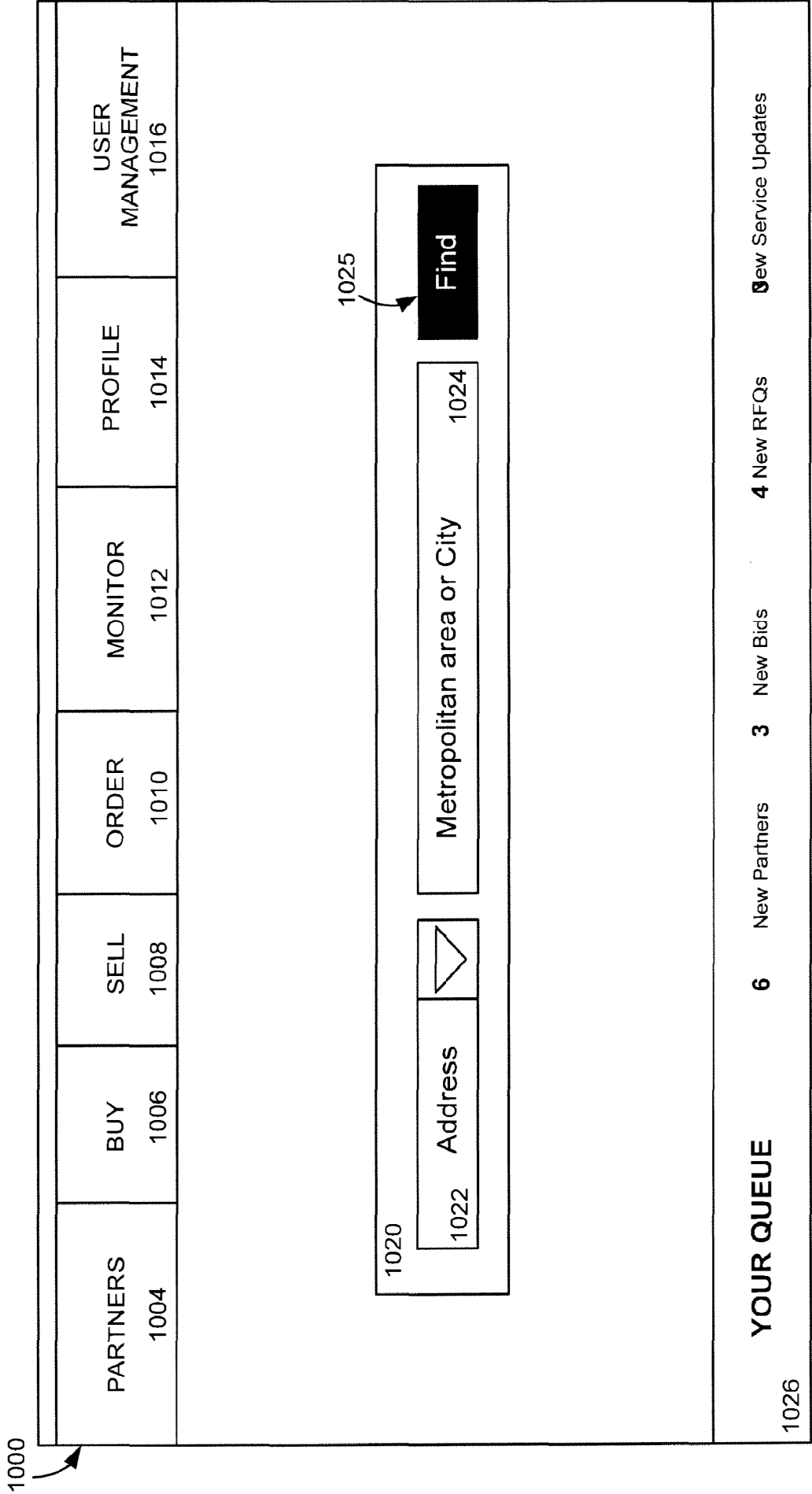
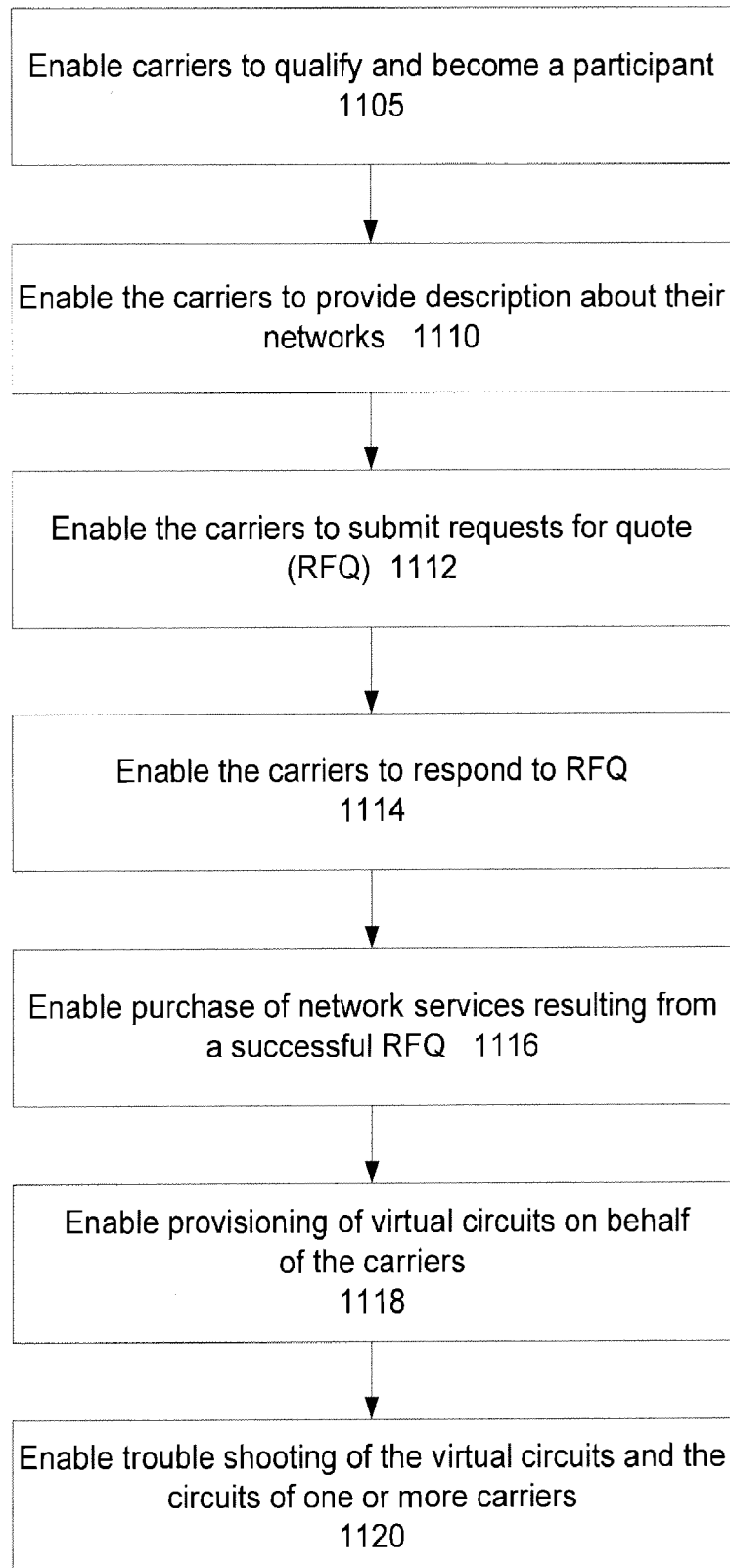
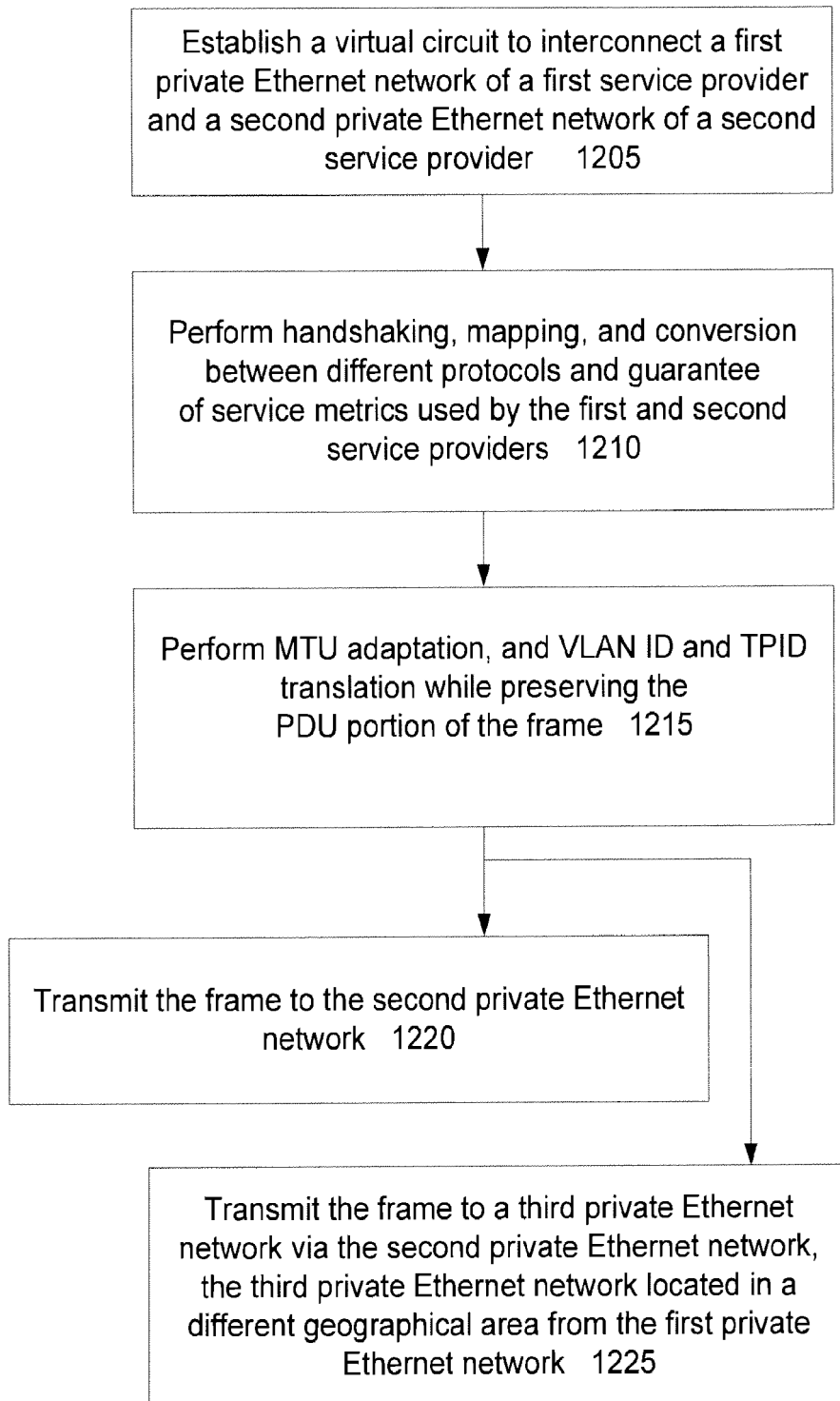
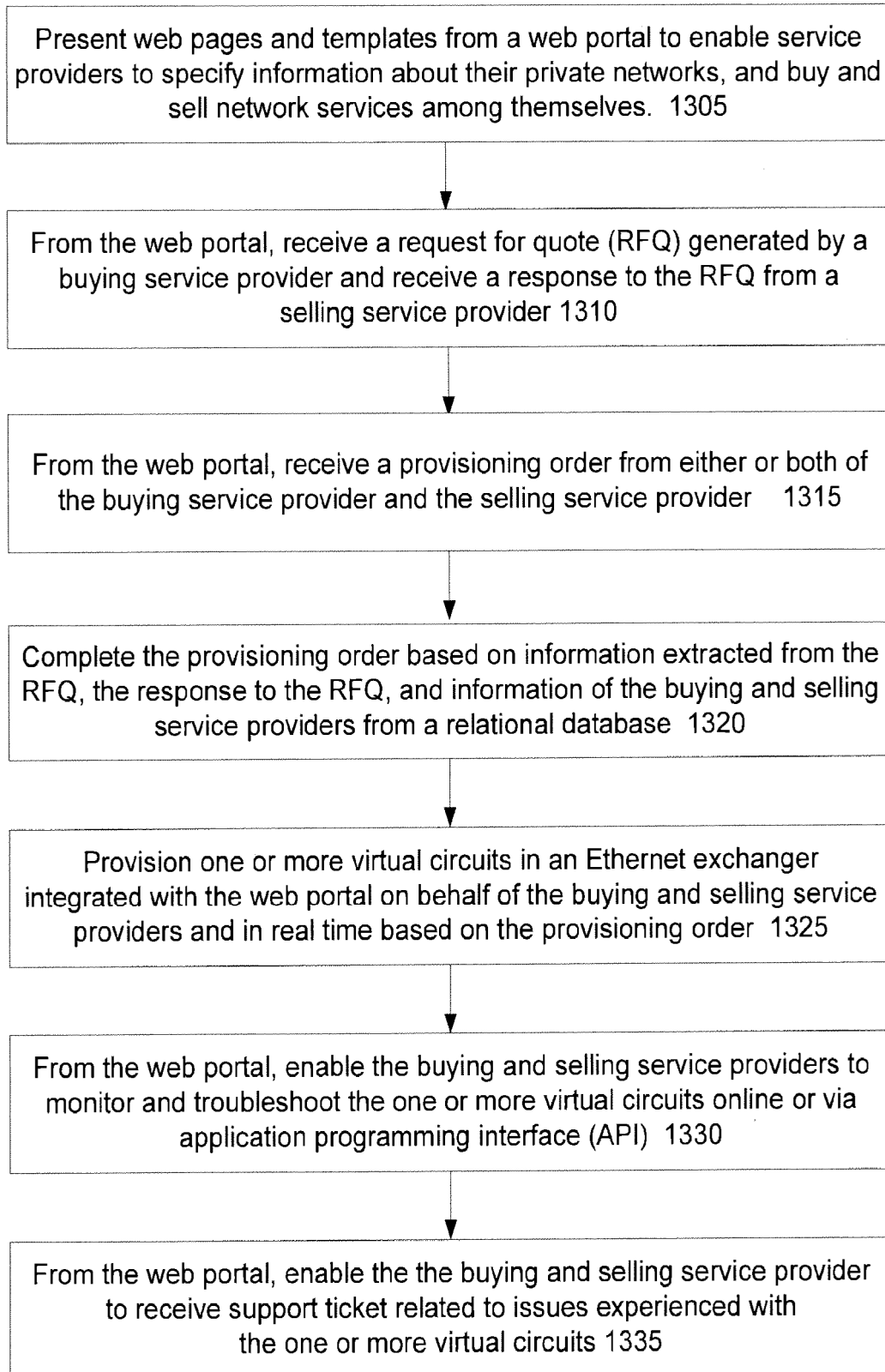


FIG. 10

**FIG. 11**

**FIG. 12**

**FIG. 13**