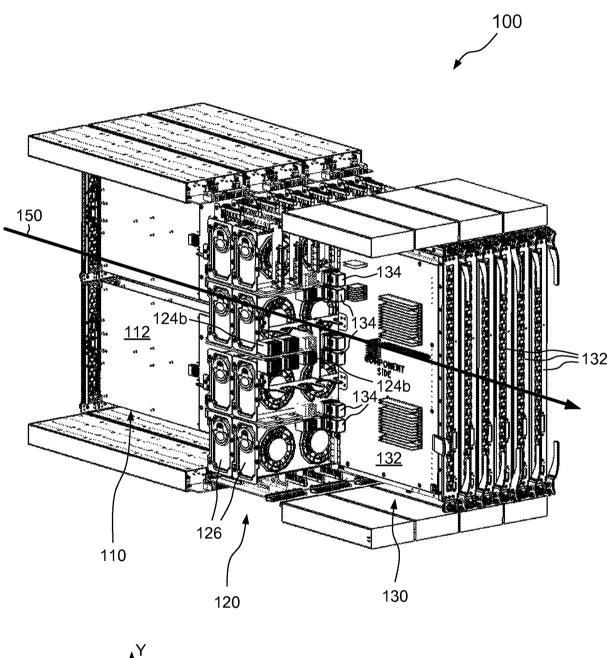


FIG. 1



-Z Y -X 102

FIG. 2

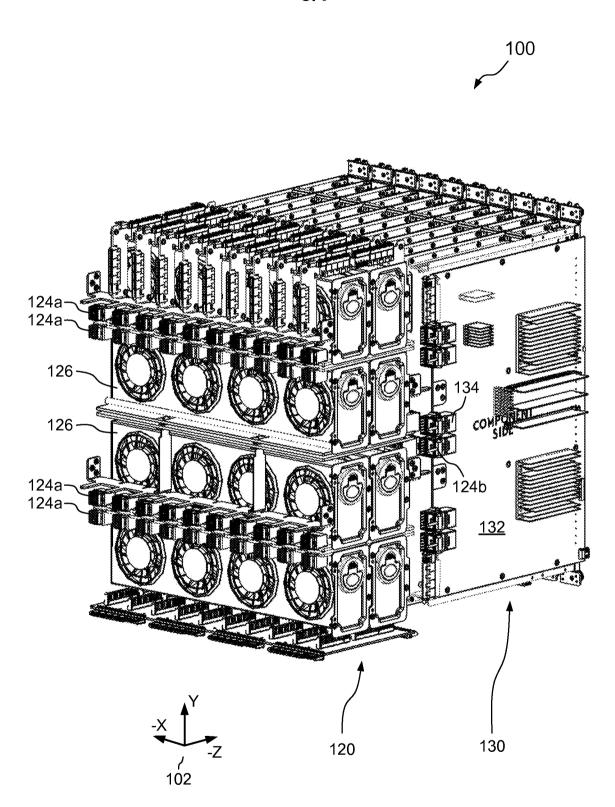


FIG. 3

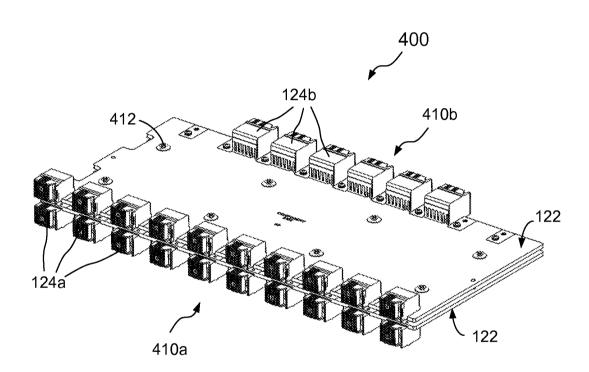


FIG. 4

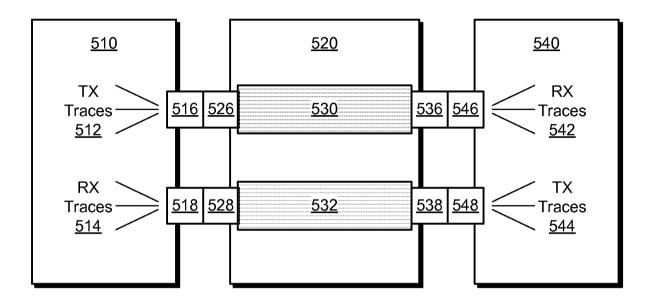


FIG. 5

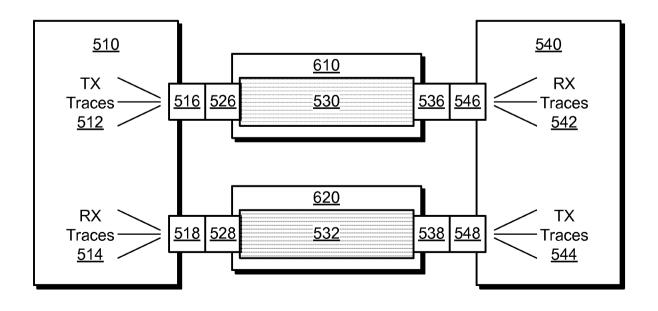


FIG. 6

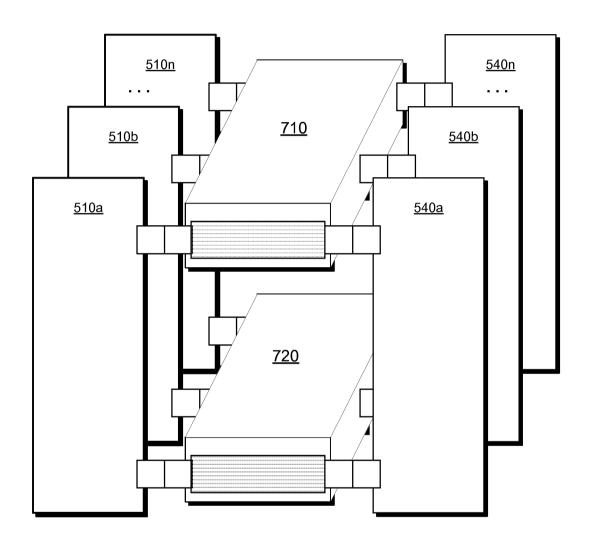


FIG. 7

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Physically separate multiple conductive traces for carrying transmit (TX) signals generated by the first card assembly from multiple conductive traces for carrying receive (RX) signals received by the first card assembly, including (i) providing the conductive traces for carrying the TX signals in electrical connection with a first connector of the first card assembly and (ii) providing the conductive traces for carrying the RX signals in electrical connection with a second connector of the first card assembly

800 /

812

Electrically couple the conductive traces for carrying the TX signals at the first connector of the first card assembly to a first connector of the second card assembly via a first set of midplane circuit board layers of the midplane assembly

814 ^

Electrically couple the conductive traces for carrying the RX signals at the second connector of the first card assembly to a second connector of the second card assembly via a second set of midplane circuit board layers of the midplane assembly distinct from the first set of midplane circuit board layers of the midplane assembly

## INTERNATIONAL SEARCH REPORT

1013/058645 07 02.2014 International application No.

PCT/US13/58645

A. CLASSIFICATION OF SUBJECT MATTER  IPC(8) - G06F 13/40; H04L 5/16 (2014.01)			
USPC - 361/785, 788, 790			
According to International Patent Classification (IPC) or to both national classification and IPC			
B. FIELDS SEARCHED			
Minimum documentation searched (classification system followed by classification symbols)  IPC(8) - G06F 13/40; H04L 5/16 (2014.01)  USPC - 361/785, 788, 790; 439/631, 636, 949			
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched			
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)			
MicroPatent (US Granted, US Applications, EP-A, EP-B, WO, JP, DE-G, DE-A, DE-T, DE-U, GB-A, FR-A); Google Patents; Google Scholar; IP.COM, IEEE Xplore; Search Terms Used: backplane*, midplane, different, separate, first, second, transmission, transmitter, TX,receiver, RX,separat*, non-overlap*, connectors, couplers, fastened, bound, attached, cross talk, cross-talk, reduce, avoid, decreas*.			
C. DOCUMENTS CONSIDERED TO BE RELEVANT			
Category*	Citation of document, with indication, where a	ppropriate, of the relevant passages	Relevant to claim No.
X US 2010/0229071 A1 (GANGA I et al.) September 09, 2010, Figures 3,		2010, Figures 3, 5, 6, paragraphs [0046],	1-7, 14-19
Y	[0050], [0051], [0054].	1], [0054].	
Y	US 2004/0092168 A1 (VADASZ I et al.) May 13, 2004 [0021], [0022], [0024], [0032], [0033].	, Figure 6, paragraphs [0005], [0006],	8-13, 20
Y US 2003/0007339 A1 (HARRIS M et al.) January 09, 2003, Abstract, Figure 1a.		13	
A US 6,325,636 B1 (HIPP C et al.) December 04, 2001, Abstract.		1-20	
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Date of the actual completion of the international search		Date of mailing of the international search report	
31 January 2014 (31.01.2014)		07 FEB 2014	
Name and mailing address of the ISA/US		Authorized officer:	
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