

Title (en)  
GRATING BASED COMMUNICATION SWITCHING

Title (de)  
GITTERBASIERTE KOMMUNIKATIONSVERMITTLUNG

Title (fr)  
COMMUTATION DE COMMUNICATION A RESEAU

Publication  
**EP 1190580 A2 20020327 (EN)**

Application  
**EP 00988106 A 20001215**

Priority  
• US 0034191 W 20001215  
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Abstract (en)  
[origin: WO0145430A2] An optical communication channel switch includes an aberration corrected spectrometer adapted for receiving plural channels of communication in a one dimensional array of sites where each site corresponds to a source, and a channel selector for selectively switching channels. After receiving the plural channels, the aberration corrected spectrometer provides the channels in a two dimensional array in which channels are distributed in rows (or columns) of similar frequency and different sources and in columns (or rows) of differing frequency and common sources. The channel selector selectively switches channels among sites in the two dimensional array and provides a single dimensional reconfigured array of frequency separated channels that is combined into the two dimensional array. Another aberration corrected spectrometer receives the selectively switched two dimensional array and combines the channels into a single dimensional array of sites having one or more frequency separated channels.  
[origin: WO0145430A2] An optical communication channel switch includes an aberration corrected spectrometer (1) adapted for receiving plural channels of communication in a one dimensional array of sites where each site corresponds to a source (12), and a channel selector (110) for selectively switching channels. After receiving the plural channels, the aberration corrected spectrometer provides the channels in a two dimensional array in which channels are distributed in rows (or columns) of similar frequency and different sources and in columns (or rows) of differing frequency and common sources. The channel selector (110) selectively switches channels among sites in the two dimensional array and provides a single dimensional reconfigured array of frequency separated channels that is combined into the two dimensional array. Another aberration corrected spectrometer (2) receives the selectively switched two dimensional array and combines the channels into a single dimensional array of sites having one or more frequency separated channels.

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**H04Q 1/00**

IPC 8 full level  
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Citation (search report)  
See references of WO 0145430A2

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