

Title (en)  
Optical crosspoint switch.

Title (de)  
Optischer Schalter für zwei sich kreuzende Lichtleiter.

Title (fr)  
Commutateur optique pour deux guides d'ondes qui se croisent.

Publication  
**EP 0000647 A1 19790207 (EN)**

Application  
**EP 78300172 A 19780720**

Priority  
US 81867077 A 19770725

Abstract (en)  
An optical crosspoint switch has a mode-sensitive reflector (121) at the crosspoint of two crossed optical waveguide channels (36, 51). Mode switches (61, 101) are coupled to the channels, one (61) in one channel upstream of the reflector and the other (101) in the other channel downstream of the reflector. With the mode switches in a non-converting state optical energy passes through the crosspoint without being redirected. With the mode switches in a converting state the optical energy is changed in mode by one of the mode switches, reflected into the other channel, and then changed back again in mode by the other mode switch. <??>Switches according to the invention can be used in a switching array suitable for use in telecommunications switching.

IPC 1-7  
**G02F 1/29**

IPC 8 full level  
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CPC (source: EP US)  
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Citation (search report)  
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• [A] US 3764195 A 19731009 - LEVINSTEIN H, et al  
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• JOURNAL OF APPLIED PHYSICS, vol. 45, no. 2, February 1974, New York, (US) S. YAMAMOTO et al.: "Circuit theory for a class of anisotropic and gyrotropic thin-film optical waveguides and design of nonreciprocal devices for integrated optics", pages 882-888

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