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## (12) United States Patent Sparks et al.

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#### (54) OPTICAL SWITCH ATTENUATOR

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(CA)

(\*) Notice: Subject to any disclaimer, the term of this

patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

08007 - ACC

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(51) Int. Cl.<sup>7</sup> ...... G02B 6/26; G02B 6/42

 (56)

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<sup>\*</sup> cited by examiner

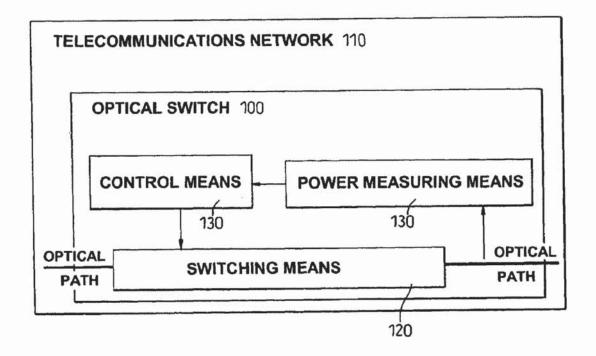
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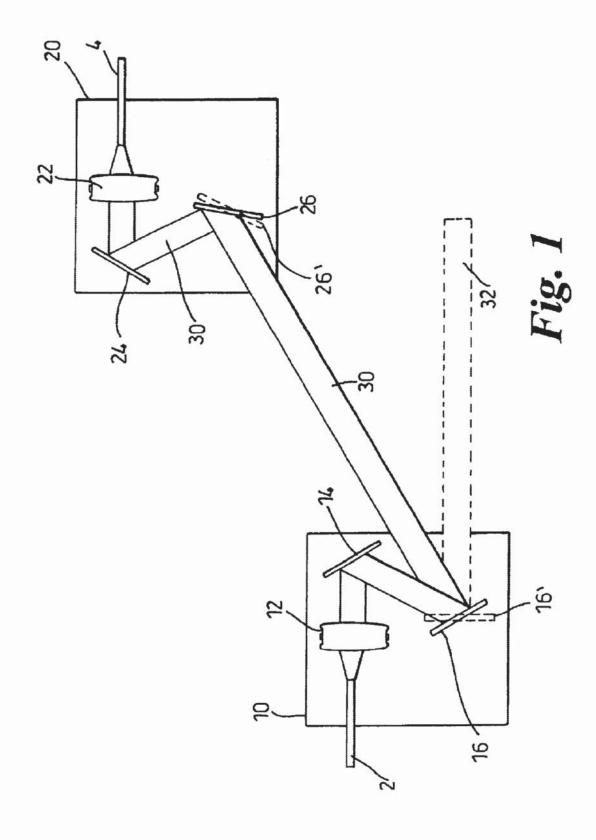
### (57) ABSTRACT

An optical switch comprising switching means arranged to switch an optical signal by redirection of the optical beam path of said signal, wherein said optical switch is arranged to misalign the optical beam path so as to provide a predetermined optical output power. Thus a switch can be directly used to attenuate a signal, instead of utilising separate attenuators.

12 Claims, 4 Drawing Sheets









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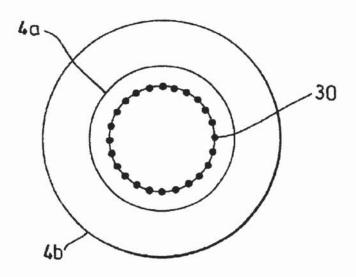


Fig. 2a

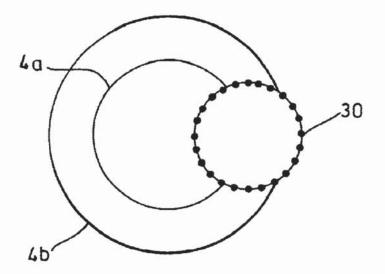
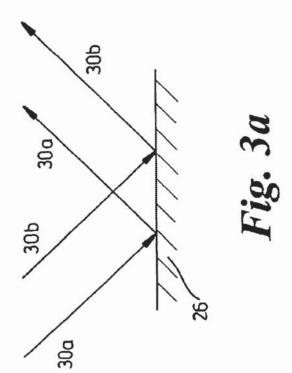


Fig 2b

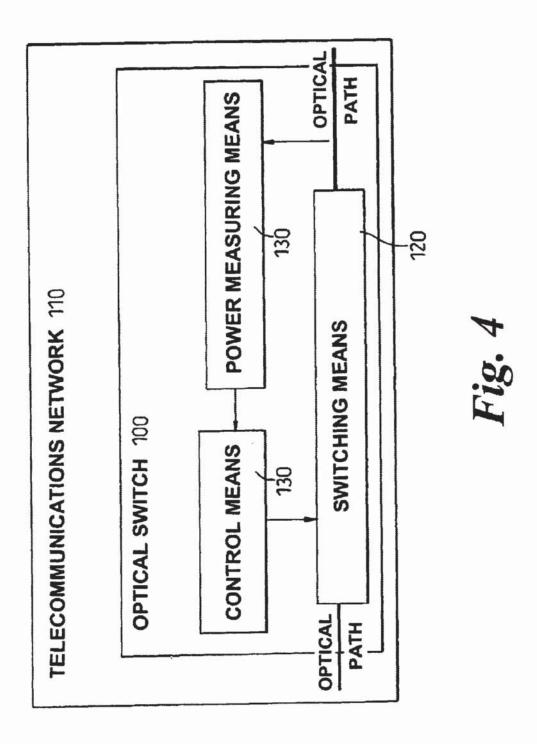
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