

# Comments and Corrections

## Corrections to "Theoretical Investigation of a Wavelength Selective Switch Architecture Based on a Bragg Grating Assisted MMIMI Configuration"

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In the above letter,<sup>1</sup> due to a sign error in the MMIMZI-solver, the told MMIMZI-output characteristics (see Fig.2)<sup>1</sup> was incorrect, basically in terms of symmetry for the given design. This solver was also used in the program for the complete WSS-device simulation, thus the WSS-configuration according to the original paper seemingly was working correctly (see Figs.1 and 3).<sup>1</sup> I apologize for the mistake and hence present the correction.

- 1) In order to couple  $\lambda_1, \lambda_5, \dots$  to MMIMZI output 1 the phase corrections for the MZ-arms should be read:  $\Phi_{k=1, \dots, 4} = \{0.5256, 1.0443, 0.3927, 3.0747\}$  instead of  $\Phi_{k=1, \dots, 4} = \{1.7069, -0.3414, 0.3927, -0.7597\}$  told on p. 840 4th line.
- 2) The MMIMZI-output characteristics should be as shown in Fig. 2. From Fig. 2 it appears how to place the Bragg grating sections, for reflection of  $\lambda_1, \lambda_5, \dots$  in MMIMZI output 1,  $\lambda_2, \lambda_6, \dots$  in output 2,  $\lambda_4, \lambda_8, \dots$  in output 3 and  $\lambda_3, \lambda_7, \dots$  in output 4.

Consequently the MMIMZI unit and the Phase control/Reflection unit should be connected as shown in Fig. 1. After correction of the program the complete WSS-device (see Fig. 1) was resimulated. The results were in all significant parts identical with the results given in Fig. 3<sup>1</sup> in the original letter.

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<sup>1</sup>T. Augustsson, *IEEE Photon. Technol. Lett.*, vol. 11, pp. 839–841, July 1999.

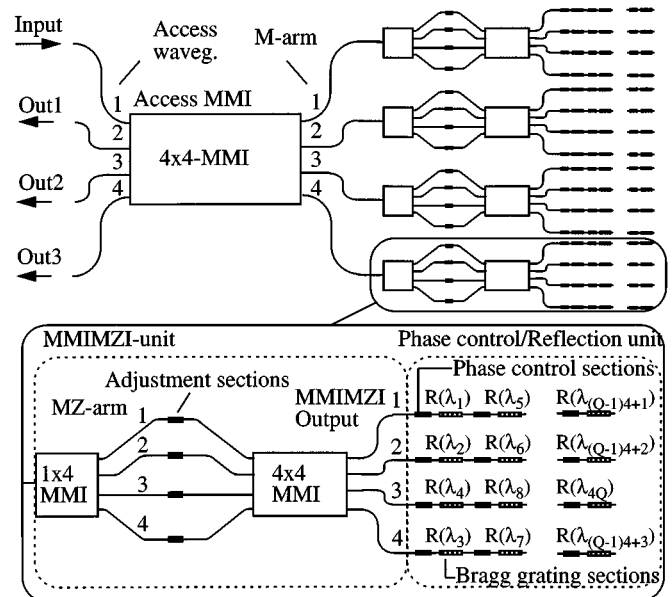


Fig. 1. Schematically layout of the MMIMIBg-principle based  $1 \times 3$  WSS. The MMIMZI section is followed by a phase control/reflection section with  $Q$  Bragg grating sections cascaded in each arm. The MMIMZI unit and the phase control/reflection unit are blown up in order to make clear how the different channels are handled by the device.

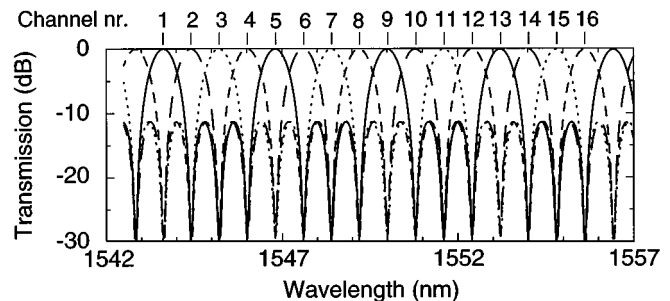


Fig. 2. Filter characteristics for the MMIMZI device used in the WSS device simulation. Transmission for output 1 (solid line), output 2 (long dashed line), output 3 (dashed line), and output 4 (dotted line).