

Monash Electro-Photonics Laboratory

Fiber Nonlinearity Compensation PATENTS

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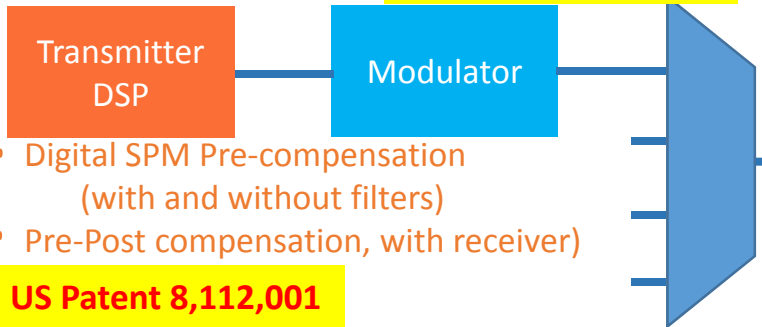
Clayton, VIC3800,
Australia

Acknowledgements

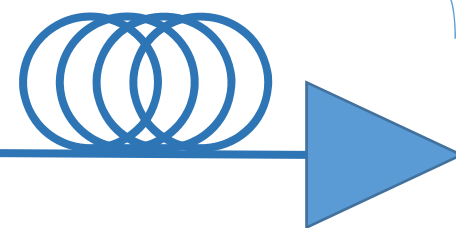
Key to the success of the Electro-Photonic Laboratory has been the combined expertise of its research fellows and students. I also thank Monash University and the Australian Research Council for their generous support, especially through a Laureate Fellowship (FL130100041), and the CUDOS Centre of Excellence (CE10001018).

Fiber Nonlinearity Compensation Methods

 Optimum Baud Rate (Granularity) in nonlinear systems **US Patent 9,294,216**



One Amplified Span



TID is Total Intensity Detection – detects all channels’ intensity and then phase modulates to undo XPM.

US Patent Accepted

(N-1) Amplified Spans

With TID

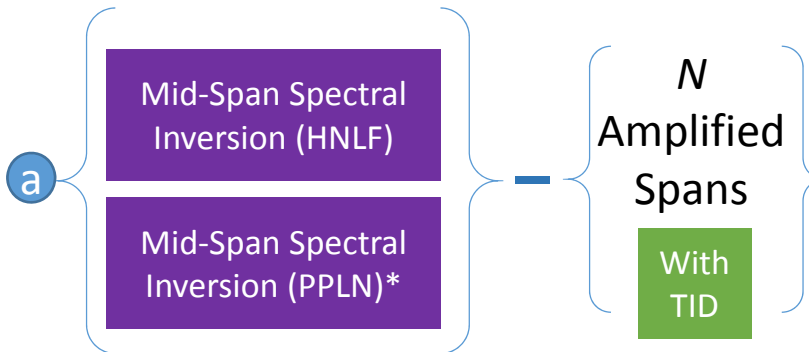
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Pilot tone XPM Compensation after SPM comp.

US Patent 9,236,951

- Digital SPM Post-compensation
- XPM compensation (TID)
- Filtered Digital Back Propagation

US Patent 9,002,210



- MSSl for OFDM
- Analysis/Simulations/Experiment
- Splitting the nonlinear Element

