

Highly efficient side-fused signal pump combiners based on CO₂-laser restructured optical fibers

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We present the manufacturing of side-fused signal-pump combiners with 25/400- μm signal feed-through fibers and >90% pump coupling efficiency. On the basis of CO₂-laser restructuring of the used optical fibers, the necessity of splice connection is avoided, which improves the pump coupling efficiency and thus overall laser efficiency.

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