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(54) **DISPERSION OPTIMIZED OPTICAL FIBER FOR WIDEBAND OPTICAL TRANSMISSION**

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(58) **Field of Classification Search** None
See application file for complete search history.

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(57) **ABSTRACT**

A dispersion optimized optical fiber for wideband optical transmission is disclosed. The fiber comprise centre core, inner cladding, ring core, outer cladding and outer glass region, characterized by inner cladding provided onto outer periphery of the centre core, ring core, ring core provided onto outer periphery of inner cladding, outer cladding provided onto outer periphery of ring core, and outer glass region surrounding outer cladding, wherein refractive indices of various regions of the fiber are related in a manner that centre core has higher refractive index than that of ring core, ring core has higher refractive index than that of outer glass region, outer cladding has equal to or lower refractive index than that of outer glass region, and inner cladding has lower refractive index than that of outer cladding region, that is the refractive index of various regions of the fiber is related by relationship $n_1 > n_3 > n_5 \cong n_4 > n_2$ or the relationship $Del_1 > Del_3 > Del_5 \cong Del_4 > Del_2$.

20 Claims, 8 Drawing Sheets

