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(54) **MULTIMODE OPTICAL FIBER AND METHODS OF USE AND DESIGN THEREOF**

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G06F 17/10	(2006.01)
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USPC 385/123, 124, 125, 126

See application file for complete search history.

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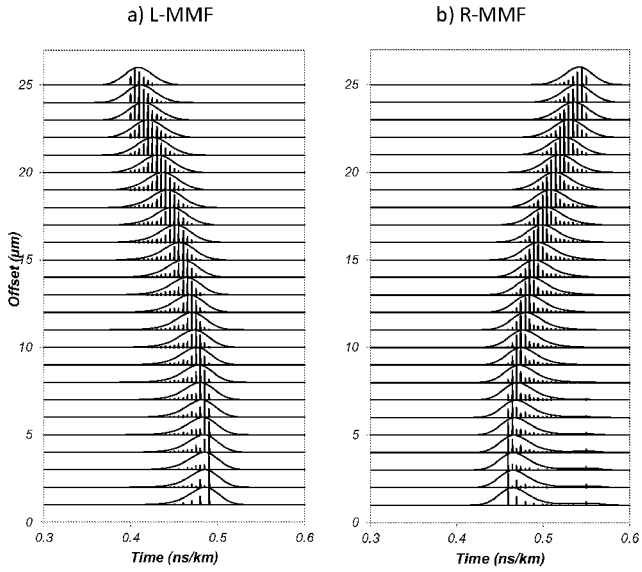
(57) **ABSTRACT**

The present invention relates generally to multimode optical fibers (MMFs) and methods for optimizing said MMFs for transmission for at least two optical wavelengths. In an embodiment, the present invention is a multimode optical fiber optimized for multi-wavelength transmission in communication systems utilizing VCSEL transceivers, where the MMF has a bandwidth designed to maximize channel reach for multiple wavelengths, and/or where the MMF minimizes for wavelength dependent optical power penalties at one or more wavelength.

13 Claims, 6 Drawing Sheets