



US006115523A

**United States Patent** [19]  
**Choi et al.**

[11] **Patent Number:** **6,115,523**  
[45] **Date of Patent:** **Sep. 5, 2000**

[54] **PLASTIC OPTICAL FIBER AIRWAY IMAGING SYSTEM**

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[21] Appl. No.: **08/725,779**

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[22] Filed: **Oct. 4, 1996**

[51] **Int. Cl.<sup>7</sup>** ..... **G02B 6/06**

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[52] **U.S. Cl.** ..... **385/116; 385/117; 600/199**

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[58] **Field of Search** ..... 385/116, 117, 385/118; 600/463, 342, 566, 109, 139, 199

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[57] **ABSTRACT**

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The subject invention pertains to a system for imaging the human airway having highly advantageous optical and physical characteristics. In a specific embodiment, the human airway can be imaged during the intubation procedure. The excellent characteristics of the imaging system of the subject invention result, in part, from the use of plastic optical fibers. Plastic fibers are more robust than the glass optical fibers used in currently available imaging systems, and are therefore capable of being bent and/or twisted with less concern of breakage. In addition, the lower costs of plastic fibers enables scopes of the subject invention, in a specific embodiment, to be manufactured for single patient use thereby eliminating the requirement for cleaning, special care, the maintenance of expensive inventory, and most importantly eliminating the opportunity for cross contamination between patients. A further aspect of the subject invention concerns a novel sheath which covers the portion of the imaging system which enters the patient. In this case, the sheath and its optional associated fiber optic illumination is disposable after each use.

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**4 Claims, 2 Drawing Sheets**

