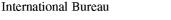
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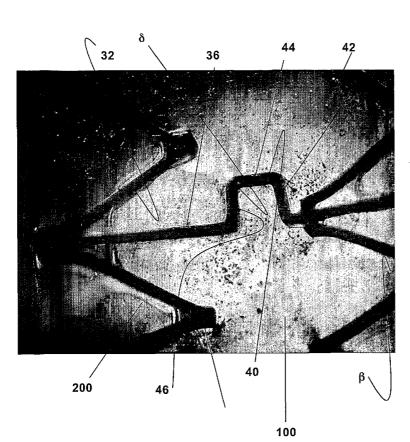
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[Continued on next page]

(54) Title: COVERED STENT WITH GEOMETRY DETERMINATED FUNCTIONALITY AND METHOD OF MAKING THE SAME



(57) Abstract: The present invention, in an exemplary embodiment, provides a stent, which combines many of the excellent characteristics of both silicone and metal stents while eliminating the undesirable ones. In particular, a principal objective in accordance with the present invention is to provide a family of stents where the relative hardness/softness of regions of the stent can differ from other regions of the stent to provide additional patient comfort and resistance to compression forces. Exemplary embodiments provide a stent that is covered in a manner that limits the amount of covering surface area that is in direct contact with the target lumen. In particular, a covered stent is provided that is covered internally such that the outer scaffolding surface of the stent is raised from the outer surface of the covering. To this end, cilia function is only partially limited and mucociliary clearance is not significantly affected. Moreover. the covering itself has anti-adherent properties such that bacteria, fungi or other microbials cannot colonize the cover in particular and the stent generally.

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