



**United States Patent** [19]  
**Rinner**

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## [54] FUSION MASS CONSTRAINER

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[52] **U.S. Cl.** ..... 606/86; 606/61

[58] **Field of Search** ..... 606/86, 60, 61;  
623/17, 16

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[57] **ABSTRACT**

A bone fusion mass constrainer is useful for promoting fusion between a pair of adjacent vertebrae. The bone fusion mass constrainer includes a generally cylindrical cage assembly having an internal cavity with open top and bottom surfaces. The cage portion is intended to be positioned in contact with the cancellous bone of the adjacent vertebrae. A pair of horizontal platforms extend out from the cage assembly and provide support for the vertebrae by contacting the harder cortical bone of the endplates of the vertebrae. Bone graft is inserted into the cavity where it contacts the cancellous bone of the adjacent vertebrae and promotes fusion between the two vertebrae. An end cap is provided over the proximal opening of the cage assembly to prevent migration of bone graft out from the cage. The bone fusion mass constrainer also includes a pair of blades which can be extended outwardly from the cage assembly and into the cancellous bone of the adjacent vertebrae in order to prevent migration of the device from between the vertebrae.

**12 Claims, 6 Drawing Sheets**

