

### [54] ULTRASONIC CUT AND SEAL APPARATUS

[75] Inventor: **Carmine M. Mango**, Brookfield Center, Conn.

[73] Assignee: **Branson Ultrasonics Corporation**, Danbury, Conn.

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[58] Field of Search ..... **156/73.1, 73.2, 73.3, 156/580.1, 580.2, 88, 250, 251, 267, 510, 515; 228/1.1**

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*Primary Examiner*—Michael Wityshyn  
*Attorney, Agent, or Firm*—Philip J. Feig; Ervin B. Steinberg

### [57] ABSTRACT

An ultrasonic cut and seal apparatus comprises a resonator having a removable tip which includes an inclined bore through which a filament is fed to the output surface of the resonator and upon the sheet material to be cut and sealed. The bore accurately guides the filament to the cut and seal region for causing the filament to be fused with the sheet material in the region adjoining the cut. The cutting and sealing is effected by the combination of an anvil exhibiting a cutting surface and at least one tapered sealing surface disposed opposite the output surface of the resonator when the sheet material is fed through the nip between the anvil and the resonant resonator.

**5 Claims, 6 Drawing Figures**

