

[54] METHOD AND APPARATUS FOR PRODUCING AN HF-INDUCED NOBLE-GAS PLASMA

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Related U.S. Application Data

[63] Continuation of Ser. No. 931,031, Nov. 17, 1986, abandoned.

[30] Foreign Application Priority Data

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[52] U.S. Cl. .... 315/248; 315/111.21; 315/267; 313/231.31; 313/570; 313/607; 313/631; 333/24 C; 333/99 PL

[58] Field of Search ..... 333/24 C, 99 PL, 32; 315/248, 111.1, 111.2, 267; 313/362.1, 231.01, 231.1, 231.3, 570, 574, 607, 631

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Primary Examiner—James J. Groody

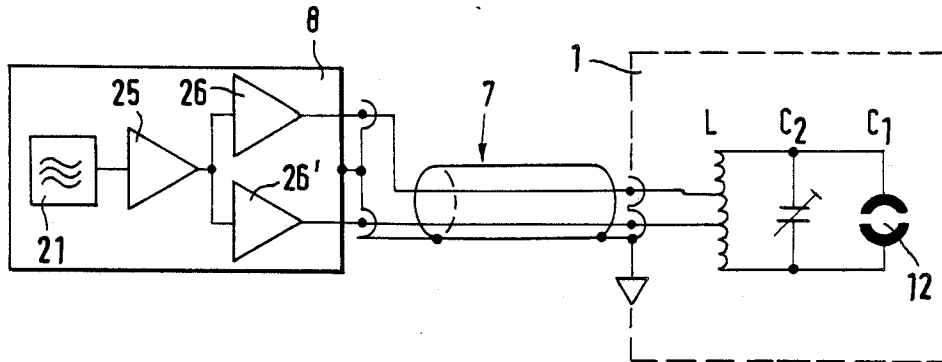
Assistant Examiner—Mark R. Powell

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[57] ABSTRACT

The invention concerns a method and apparatus to produce a noble-gas plasma for excitation in optical emission spectrometry. The apparatus includes an hf generator feeding an oscillation circuit consisting of at least one inductor and one capacitor. The capacitor includes at least two capacitor plates which are so shaped and mutually arranged that they enclose a cavity in which the plasma may form.

16 Claims, 7 Drawing Sheets



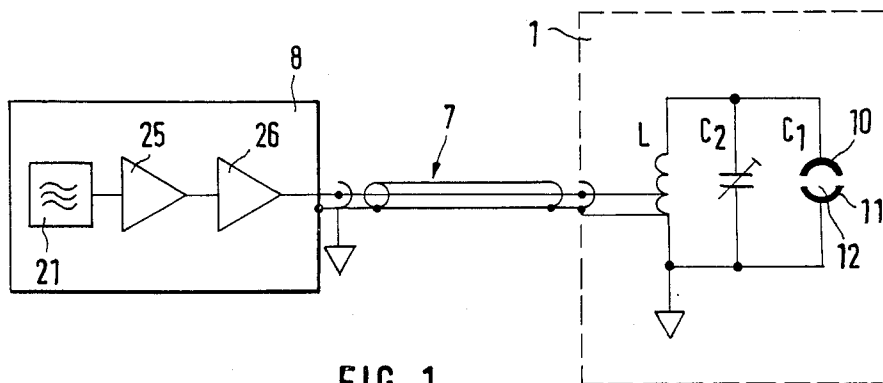


FIG. 1

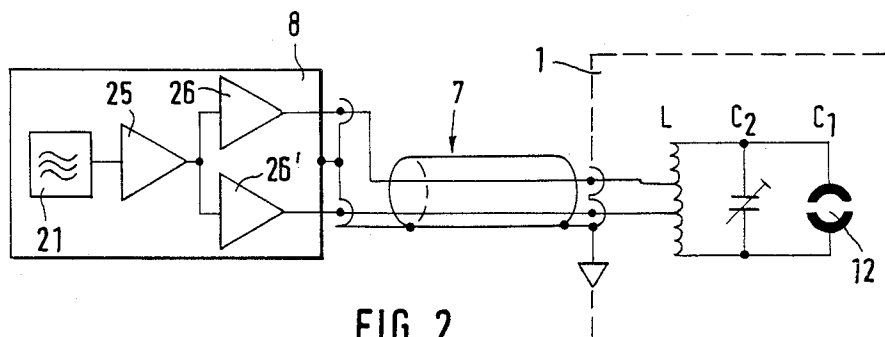


FIG. 2

FIG. 3

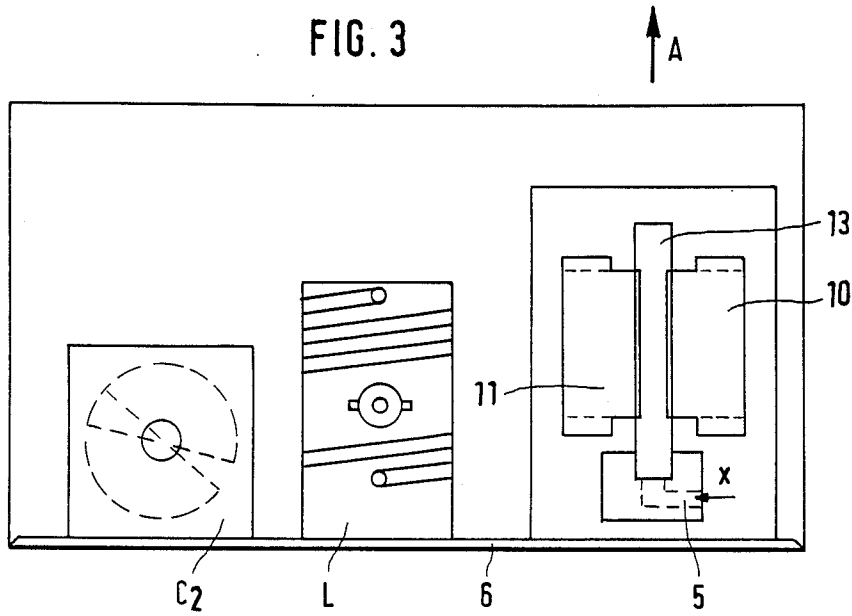
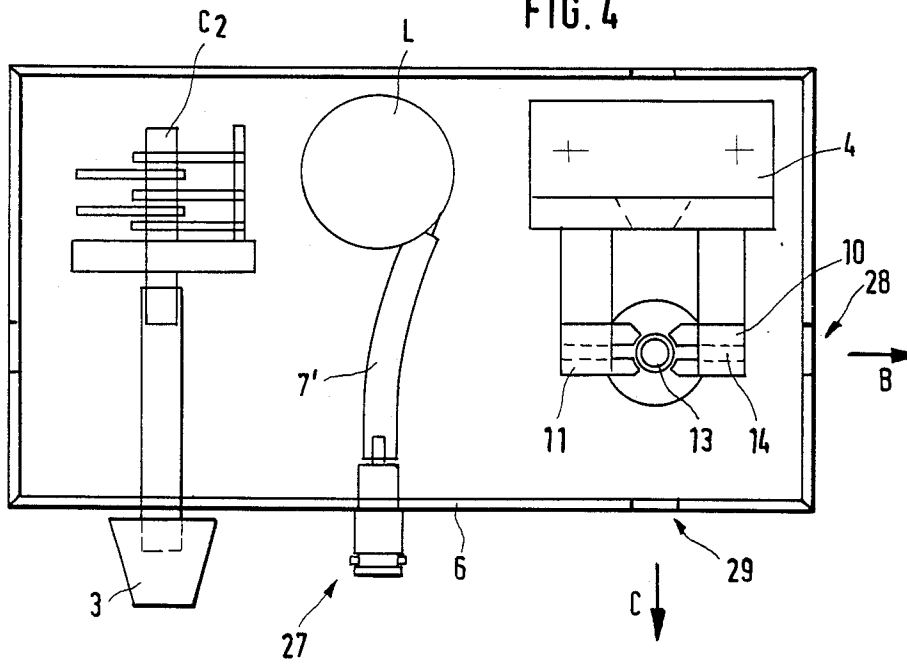


FIG. 4



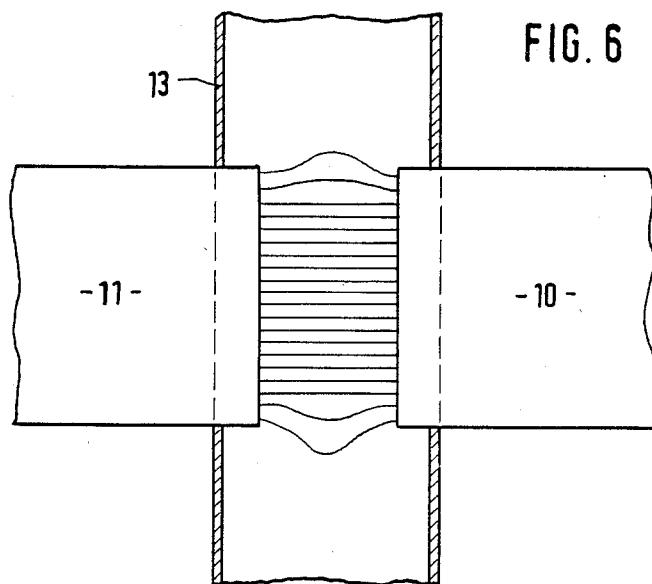
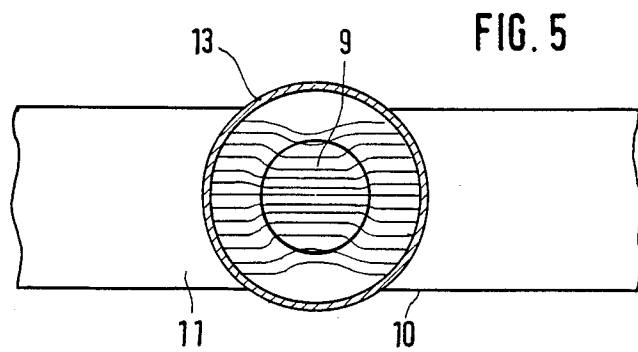


FIG. 7

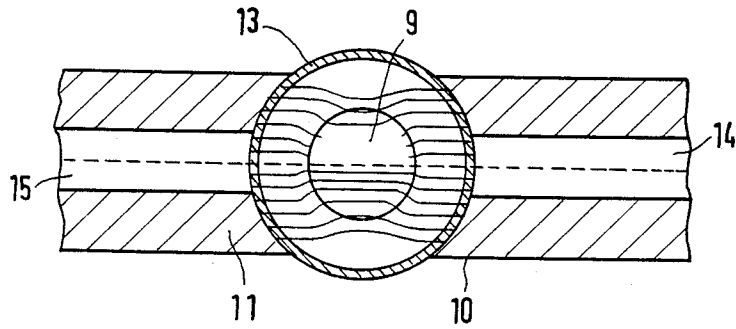
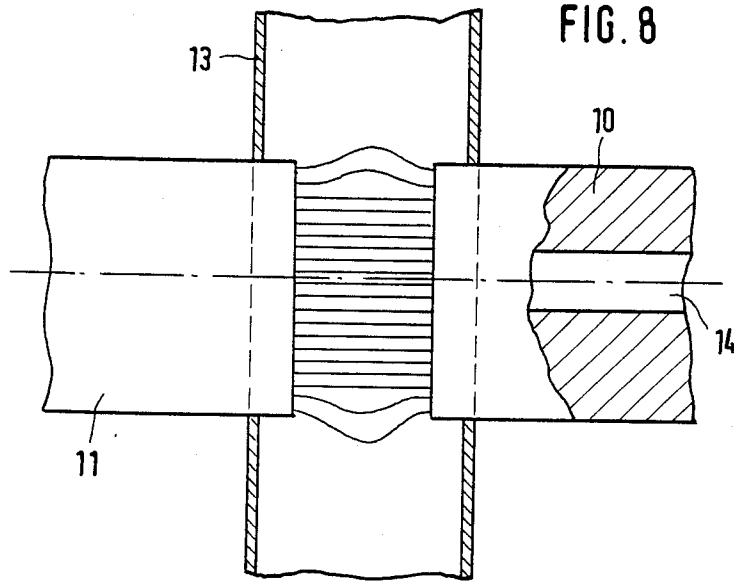


FIG. 8



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