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[54] LASER-EXCITED X-RAY SOURCE

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[51] **Int. Cl.**[6] **H05G 2/00**

[52] **U.S. Cl.** **378/119**; 378/120

[58] **Field of Search** 378/119, 120, 378/143

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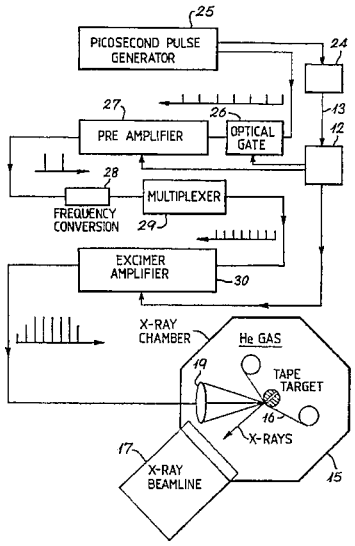
[57] **ABSTRACT**

A laser-excited X-ray source in which the efficiency of conversion of laser energy into X-ray energy, and the average X-ray output power, are increased by providing laser light, which is focussed on a target to generate X-rays, in the form of trains of very short pulses with a pulse duration in the range 1–10 picoseconds. Preferably it is arranged such that successive pulses in a train are focussed at adjacent but different points on the target.

19 Claims, 10 Drawing Sheets