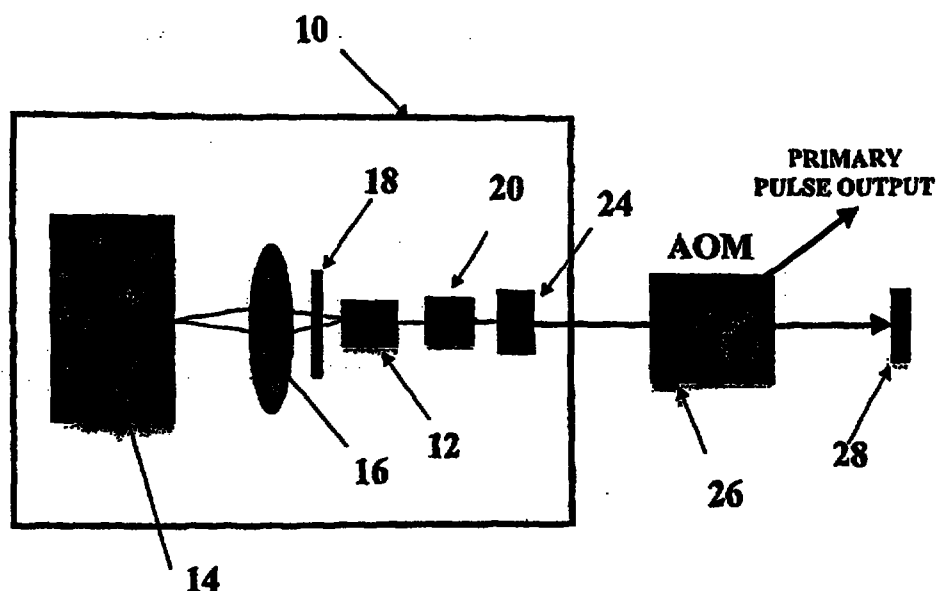




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(54) Title: PULSE CONTROL IN LASER SYSTEMS



(57) Abstract

A pulsed laser system includes a laser pump (14), a laser rod (12), a reflector (18) interposed between the laser pump and the laser rod, through which energy from the laser pump enters the laser rod, an output reflector (28) through which energy is emitted from the laser rod, a switch (20) interposed between the laser rod and the output reflector, and a control device. The control device allows a primary laser pulse emitted from the laser rod during the emission period to impinge on a workpiece and blocks from the workpiece secondary laser emission occurring during the emission period after emission of the primary pulse. The pulsed laser system is operated over a range of repetition rates, so as to cause laser energy emitted during plural emission periods at each repetition rate. A portion of the laser energy emitted is directed toward the target structure.