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(54) **Title**: MULTIPLEXING OF PULSED SOURCES

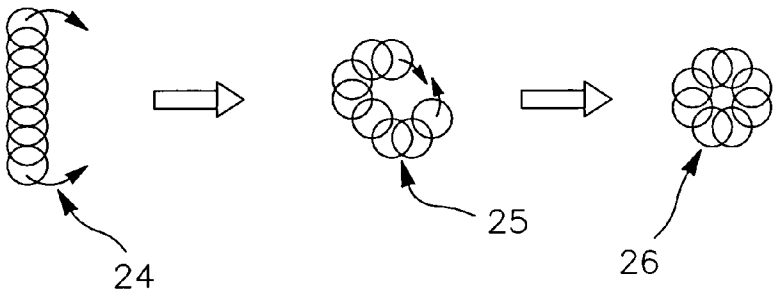

FIG. 12

(57) **Abstract**: The invention concerns a device (10) for generating an output radiation through an output aperture (5), said device (10) comprising a plurality of radiation sources (11-14) and a temporal multiplexer (15) for temporally- multiplexing the radiation sources (11-14). Each radiation source comprises a plasma (211) in which an elementary radiation is generated and in which rays of this elementary radiation are selectively deviated as a function of their wavelength. Such sources have a small size and a small etendue. The device can comprise for example one hundred or more radiation sources. Each radiation source can be used to generate a dynamically modified radiation pattern (24, 25, 26), or as a reserve source that replaces a broken down source, or as a supportive source that generates a radiation only if the power of the output radiation is lower than a minimum threshold value. The invention also relates to a process implemented by said device, and to a photolithography apparatus comprising said device.