

Abstract of the disclosure

The invention relates to an optical-fibre laser system comprising an injector (100) generating a source pulse (10), a spectro-temporal shaping module (110), at least one final optical-fibre amplifier (150) having a length less than ten metres, the final amplifier (150) being suitable for receiving a filtered pulse (14) from a spectral filter (120) and generating an amplified pulse (15) with controlled chirp, a volume compressor (170) which has a predetermined linear chirp and is suitable for receiving the amplified pulse (15) and forming a compressed pulse (17) having a duration of less than 3 picoseconds and electronic means for adjusting the duration of the compressed pulse, the electronic duration adjusting means being formed by means (180) for adjusting the energy of the source pulse (10) and/or the amplified pulse (15), the duration of the compressed pulse (17) being tunable according to the energy setting.

Figure for the abstract: Fig. 1