LASER DISSOCIATION OF DIATOMIC MOLECULES APPLIED TO OXYGEN FOR OZONE PRODUCTION

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A method is presented for dissociation of diatomic molecules, found in a precisely defined atmosphere, through successive absorption of a quantum energy generated by laser effect, at a certain frequency and a certain density of energy, until the energy in this wy accumulated became equal with the dissociation energy. The exact quantum fluctuation theory was used in the present work to determine the probability of the process of molecular dissociation using succesive multiphotonic excitation. Applying my theoretical result, I have obtained and elaborated a new practical method of ozone production, whose efficiency exceeds those of classical methods, using corona discharge or uv radiation.

[1] S. Popescu, ”A method of ozone generation”, Patents, Romania, Certificate NO. 103488,1993.