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- (54) **Title:** A METHOD OF QUANTIFYING A CONCENTRATION OF AN ANALYTE IN A SAMPLE
- (57) **Abstract:** The present invention relates to a method of quantifying a concentration c_s of an analyte in a sample, and in particular, to a method of quantifying a concentration c_s of a target nucleic acid in a sample based on the principle of random distribution of analytes/targets provided in a sample with a known volume across a defined number of multiple pre-made reaction compartments. The present invention also relates to an aqueous suspension of a pre-defined number N_B of hydrogel microspheres for use in a method of quantifying a concentration c_s of an analyte, in particular of a target nucleic acid, in a sample. Moreover, the present invention also relates to a macroparticle for use in such method. Finally, the present invention also relates to a method of generating an aqueous suspension of a pre-defined number N_B of hydrogel microspheres.