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(54) Title: FED-BATCH FERMENTATION PROCESS AND CULTURE MEDIUM FOR THE PRODUCTION OF PLASMID DNA IN *E.COLI* ON A MANUFACTURING SCALE

(57) Abstract: A process for producing plasmid DNA *E. coli* cells comprises a pre-culture and fed batch process. The culture media of the batch phase and the culture medium added during the feeding phase are chemically defined. The culture medium of the feeding phase contains a growth-limiting substrate and is added, for at least a fraction of the feeding phase, at a feeding rate that follows a pre-defined exponential function, thereby controlling the specific growth rate at a pre-defined value. The process results in high yield and homogeneity of plasmid DNA.

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