Title (en)

METHOD OF CULTIVATING BIOMASS

Title (de

VERFAHREN ZUR ANZUCHT VON BIOMASSE

Title (fr)

PROCEDE DE CULTURE DE BIOMASSE

Publication

EP 0932660 A1 19990804 (DE)

Application

EP 97910254 A 19971004

Priority

- DE 9702277 W 19971004
- DE 19642105 A 19961012

Abstract (en)

[origin: DE19642105A1] Methylotrophic micro-organisms are cultivated in known manner on the carbon substrate, methanol, using continuous measuring and secondary feeding processes in order to restrict the methanol concentration to very low values. According to the invention, a cultivation method comprising a plurality of cultivation stages is carried out in agitated and aerated bioreactors, the average methanol concentration decreasing from one stage to the next owing to suitable feeding methods. To that end, the methanol fed in during the cultivation stage (k-2) is proportional to the alkaline solution added in metered amounts during the regulation of the pH, in the cultivation stage (k-1), as the specific dosage, and in the final cultivation stage (k) first as the specific and then as the pO2-regulated dosage. This method prevents an accumulation of toxic intermediates and avoids the need to measure and regulate the methanol concentration during the entire cultivation period, such that costs are considerably reduced, in particular when the method is applied on an industrial scale.

IPC 1-7

C12N 1/00; C12N 1/32; C12M 1/36

IPC 8 full level

C12M 1/36 (2006.01); C12N 1/00 (2006.01); C12N 1/32 (2006.01)

CPC (source: EP)

C12N 1/32 (2013.01)

Citation (search report)

See references of WO 9816624A1

Designated contracting state (EPC)

AT BE CH DE DK FR GB IT LI NL SE

DOCDB simple family (publication)

DE 19642105 A1 19980416; EP 0932660 A1 19990804; JP 2000514313 A 20001031; WO 9816624 A1 19980423

DOCDB simple family (application)

DE 19642105 A 19961012; DE 9702277 W 19971004; EP 97910254 A 19971004; JP 51789198 A 19971004