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<p>(21) International Application Number: PCT/NL96/00306</p> <p>(22) International Filing Date: 29 July 1996 (29.07.96)</p> <p>(30) Priority Data: 95202070.9 28 July 1995 (28.07.95) EP (34) Countries for which the regional or international application was filed: NL et al.</p> <p>(71) Applicant (for all designated States except US): RIJKSUNIVERSITEIT GRONINGEN [NL/NL]; Broerstraat 5, NL-9712 CP Gronigen (NL).</p> <p>(72) Inventors; and (75) Inventors/Applicants (for US only): WELLING, Gjalt, Wietze [NL/NL]; Rijksuniversiteit Groningen, Broerstraat 5, NL-9712 CP Groningen (NL). SCHUT, Frederik [NL/NL]; Rijksuniversiteit Groningen, Broerstraat 5, NL-9712 CP Groningen (NL). LANGENDIJK, Petra, Simone [NL/NL]; Rijksuniversiteit Groningen, Broerstraat 5, NL-9712 CP Groningen (NL). JANSEN, Gijsbert, Johan [NL/NL]; Rijksuniversiteit Groningen, Broerstraat 5, NL-9712 CP Groningen (NL). WILKINSON, Michael, Hendrik, Francis [NL/NL]; Rijksuniversiteit Groningen, Broerstraat 5, NL-9712 CP Groningen (NL). ELFFRICH, Peter [NL/NL]; Rijksuniver-</p>	<p>siteit Groningen, Broerstraat 5, NL-9712 CP Groningen (NL).</p> <p>(74) Agent: SMULDERS, Th., A., H., J.; Verenigde Octrooibureaux, Nieuwe Parklaan 97, NL-2587 BN The Hague (NL).</p> <p>(81) Designated States: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, ARIPO patent (KE, LS, MW, SD, SZ, UG), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG).</p> <p>Published <i>With international search report.</i> <i>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i></p> <p>(88) Date of publication of the international search report: 10 April 1997 (10.04.97)</p>	
(54) Title: METHODS AND MATERIALS FOR DETERMINING RELATIVE ABUNDANCE OF MICROORGANISMS IN MIXED POPULATIONS		
(57) Abstract The present invention relates to a method for determining the relative abundance of individual species or lower phylogenetic subgroups of microorganisms in a mixed population of several microorganisms comprising the steps of: 1) providing a set of labelled <i>in situ</i> hybridization cluster oligonucleotide probes; 2) hybridization of said probes with a sample of the mixed population, and 3) quantitative analysis of the number of labelled microorganisms. Further it relates to a method for analyzing dynamics in relative abundance of individual microorganisms in a mixed population. Further it relates to a set of probes which are cluster specific and which are provided with at least one label for use in method of the invention and to a kit of parts for determining the relative abundance of individual species of microorganisms in a mixed population of several microorganisms comprising such probes together with suitable materials for pretreating the sample and/or suitable materials for carrying out hybridization and/or suitable materials for analysis of the result of the hybridization.		

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INTERNATIONAL SEARCH REPORT

International Application No

PC 1/NL 96/00306

A. CLASSIFICATION OF SUBJECT MATTER
IPC 6 C12Q1/68

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 6 C12Q

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 497 464 A (AMOCO CORP.) 5 August 1992 cited in the application see the whole document ---	1-16
A	EP 0 357 436 A (RES DEV FOUNDATION) 7 March 1990 see page 10, line 20 - line 34; example 3 ---	1-16
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Patent family members are listed in annex.

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International Application No
PCT/NL 96/00306

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