Title (en)

SYSTEM AND METHOD FOR DETERMINING RADIUS OF GYRATION, MOLECULAR WEIGHT, AND INTRINSIC VISCOSITY OF A POLYMERIC DISTRIBUTION USING GEL PERMEATION CHROMATOGRAPHY AND LIGHT-SCATTERING DETECTION

Title (de)

SYSTEM UND VERFAHREN ZUR BESTIMMUNG DES GYRATIONSRADIUS, DES MOLEKULARGEWICHTS UND DER INTRINSISCHEN VISKOSITÄT EINER POLYMERVERTEILUNG UNTER VERWENDUNG VON GELPERMEATIONSCHROMATOGRAPHIE UND LICHTSTREUUNGSNACHWEIS

Title (fr)

SYSTEME ET PROCEDE PERMETTANT DE DETERMINER LE RAYON DE GIRATION, LA MASSE MOLECULAIRE ET LA VISCOSITE INTRINSEQUE D'UNE DISTRIBUTION DE POLYMERE, AU MOYEN DE LA CHROMATOGRAPHIE D'EXCLUSION DIFFUSION ET DE LA DETECTION A DIFFUSION DE LUMIERE

Publication

EP 1438575 A2 20040721 (EN)

Application

EP 02782217 A 20021023

Priority

- US 0233945 W 20021023
- US 33525401 P 20011023

Abstract (en)

[origin: WO03036258A2] A system and method for analyzing data from a gel permeation chromatography (GPC) or size exclusion chromatography (SEC) system for determining a polymeric sample's radius of gyration. Data from two or more detectors (18) is used with a least-squares minimization fit (20). A novel method includes the simultaneous determination of a sample's radius of gyration using data from a light scattering detector that collects data from at least two incident angles. Detectors within the inventive method include a multi-angle light scattering (LS) detector, viscometer (V) and a refractive index (RI) detector.

IPC 1-7

G01N 31/00

IPC 8 full level

G01N 30/88 (2006.01); **G01N 15/02** (2006.01); **G01N 30/42** (2006.01); **G01N 30/62** (2006.01); **G01N 30/74** (2006.01); **G01N 30/78** (2006.01); **G01N 30/86** (2006.01); G01N 11/00 (2006.01); G01N 30/02 (2006.01); G01N 33/44 (2006.01)

CPC (source: EP)

G01N 15/0205 (2013.01); **G01N 30/8693** (2013.01); **G01N 30/88** (2013.01); G01N 30/02 (2013.01); G01N 30/78 (2013.01); G01N 30/8651 (2013.01); G01N 33/442 (2013.01); G01N 2011/0026 (2013.01); G01N 2030/885 (2013.01)

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LU MC NL PT SE SK TR

DOCDB simple family (publication)

WO 03036258 A2 20030501; **WO 03036258 A3 20030605**; AU 2002348395 A1 20030506; EP 1438575 A2 20040721; EP 1438575 A4 20090513; JP 2005507077 A 20050310

DOCDB simple family (application)

US 0233945 W 20021023; AU 2002348395 A 20021023; EP 02782217 A 20021023; JP 2003538708 A 20021023