



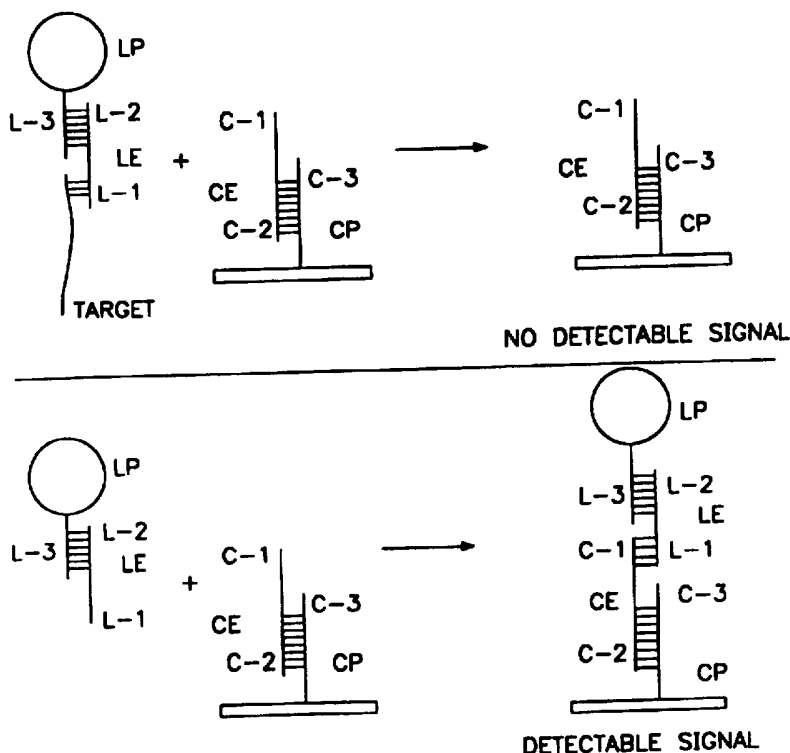
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<p>(21) International Application Number: PCT/US96/09767 (22) International Filing Date: 7 June 1996 (07.06.96) (30) Priority Data: 08/472,756 7 June 1995 (07.06.95) US 08/610,955 5 March 1996 (05.03.96) US (71) Applicant: CHIRON CORPORATION [US/US]; 4560 Horton Street, Emeryville, CA 94608 (US). (72) Inventors: SHERIDAN, Patrick, J.; 2008 Home Street, San Leandro, CA 94578 (US). GAGNE, Julio, C.; Studio #7, 5865 Doyle Street, Emeryville, CA 94608 (US). ANDERSON, Mary, L.; 1392 Danville Boulevard #202, Alamo, CA 94507 (US). LUDTKE, Douglas, N.; 136 Oak Street, Walpole, MA 02081 (US). (74) Agents: GOLDMAN, Kenneth, M. et al.; Chiron Corporation, Intellectual Property - R440, P.O. Box 8097, Emeryville, CA 94662-8097 (US).</p>	<p>(81) Designated States: AU, CA, JP, MX, European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). Published <i>With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i> (88) Date of publication of the international search report: 01 May 1997 (01.05.97)</p>	

(54) Title: ENHANCEMENT OF ALKALINE PHOSPHATASE WITH SDS IN CHEMILUMINESCENT SUBSTRATES AND ENZYME INHIBITION ASSAYS

(57) Abstract

A method of preparing a homogeneous alkaline phosphatase-oligonucleotide probe conjugate having high specific enzyme activity for use in nucleic acid hybridization assays is disclosed. Methods and compositions for enhancing the chemiluminescence from a stable 1,2-dioxetane triggered to produce a chemiluminescence are also disclosed. Indirect, competitive nucleic acid hybridization assay formats are also described that employ these methods and compositions.



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INTERNATIONAL SEARCH REPORT

International Application No
PCT/US 96/09767

A. CLASSIFICATION OF SUBJECT MATTER
IPC 6 C12Q1/68 G01N33/58

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 G01N

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

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X	US 5 254 469 A (WARREN III HAROLD C ET AL) 19 October 1993 see the whole document ---	1,3
X	EP 0 317 077 A (CHIRON CORP) 14 May 1989 cited in the application see the whole document ---	1,3
A	WO 93 13221 A (CHIRON CORP) 8 July 1993 see page 7, line 27 - page 13, line 17 ---	1-6
A	EP 0 225 807 A (CHIRON CORP) 16 June 1987 see the whole document ---	1-6
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Date of the actual completion of the international search

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International Application No
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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

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A	<p>GENETIC ANALYSIS TECHNIQUES AND APPLICATIONS, vol. 9, no. 2, 1 April 1992, pages 39-47, XP000307396 DAVINI E ET AL: "ALKALINE PHOSPHATASE INHIBITORS AS LABELS OF DNA PROBES" see the whole document ---</p>	1-6
A	<p>EP 0 254 051 A (UNIV WAYNE STATE) 27 January 1988 cited in the application see the whole document -----</p>	1-6

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