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(71) Applicant ( <i>for all designated States except US</i> ): SEQUENOM, INC. [US/US]; 11555 Sorrento Valley Road, San Diego, CA 92121 (US).  (71)(72) Applicant and Inventor: HILLENKAMP, Franz [DE/DE]; Bahlmannstrasse 5, D-48147 Münster (DE).  (72) Inventor; and (75) Inventor/Applicant ( <i>for US only</i> ): KÖSTER, Hubert [DE/US]; 8636-C Via Mallorca Drive, La Jolla, CA 92037 (US).		(88) Date of publication of the international search report: 23 March 2000 (23.03.00)	
(54) Title: INFRARED MATRIX-ASSISTED LASER DESORPTION/IONIZATION MASS SPECTROMETRIC ANALYSIS OF MACROMOLECULES			
(57) Abstract			
<p>Mixtures containing a biological macromolecule, such as a nucleic acid molecule or a polypeptide, and a liquid matrix, which absorbs infrared (IR) radiation, are provided. These mixtures are useful for analysis of the biological macromolecule by IR matrix assisted laser desorption/ionization (IR-MALDI) mass spectrometry. Also provided are processes for analyzing a biological macromolecule using IR-MALDI mass spectrometry. For example, processes for detecting the presence or identity of a biological macromolecule in a sample, or for sequencing a biological macromolecule are provided.</p>			

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# INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 99/10251

**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	BERKENKAMP ET AL.: "PERFORMANCE OF INFRARED MATRIX-ASSISTED LASER DESORPTION/IONIZATION MASS SPECTROMETRY WITH LASERS EMITTING IN THE 3 μm WAVELENGTH RANGE" RAPID COMMUN MASS SPECTROM, vol. 11, 1997, pages 1399-1406, XP000870032 the whole document	1-91, 130-134, 136, 150-152, 166,167, 169,170, 172
Y	----- -----	92-129, 135, 137-149, 153-165, 168,171, 173-226
		-/-

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**INTERNATIONAL SEARCH REPORT**

International Application No

PCT/US 99/10251

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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**INTERNATIONAL SEARCH REPORT**

Int'l. Application No

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

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International Application No

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