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(30) Priority: **03.12.1999 US 454196**

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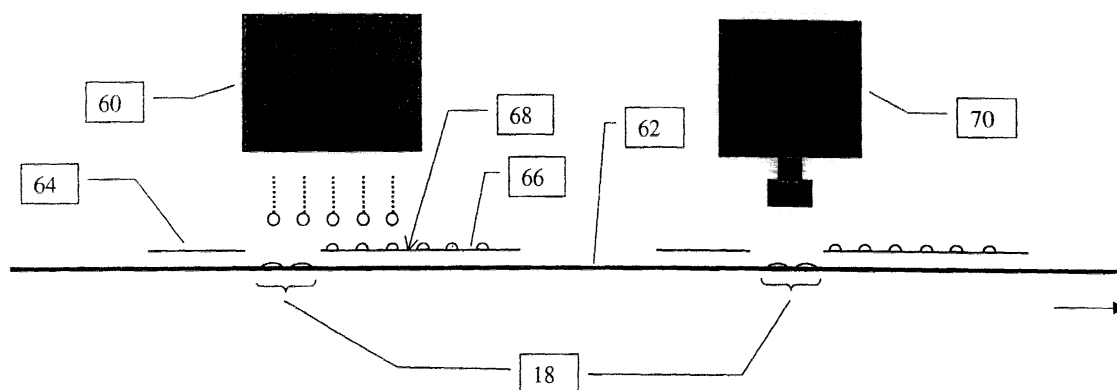
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(54) **Microdroplet dispensing for a medical diagnostic device**

(57) A medical diagnostic device has a non-absorbent substrate that has a hydrophilic target area on which a reagent is deposited by non-impact printing of microdroplets. During deposition, the device is moved relative to the stream of microdroplets to form a substantially

uniform reagent layer on the substrate. The device is particularly well adapted for measuring blood coagulation times. In a preferred embodiment, coagulation times are determined by monitoring the optical transmission of light through the target area as an applied blood sample interacts with the reagent.

Fig. 8





European Patent
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EUROPEAN SEARCH REPORT

Application Number
EP 00 31 0691

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The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 21 February 2003	Examiner Tuynman, A
CATEGORY OF CITED DOCUMENTS X: particularly relevant if taken alone Y: particularly relevant if combined with another document of the same category A: technological background O: non-written disclosure P: intermediate document T: theory or principle underlying the invention E: earlier patent document, but published on, or after the filing date D: document cited in the application L: document cited for other reasons &: member of the same patent family, corresponding document			

EPO FORM 1503 03/02 (P04001)



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Application Number
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The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 21 February 2003	Examiner Tuynman, A
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专利名称(译)	用于医疗诊断设备的微滴分配器		
公开(公告)号	EP1107004A3	公开(公告)日	2003-04-16
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[标]申请(专利权)人(译)	生命扫描有限公司		
申请(专利权)人(译)	LIFESCAN INC.		
当前申请(专利权)人(译)	LIFESCAN INC.		
[标]发明人	HARDING IAN A SHARTLE ROBERT JUSTICE		
发明人	HARDING, IAN A. SHARTLE, ROBERT JUSTICE		
IPC分类号	G01N33/50 A61B5/145 B01L3/00 G01N21/75 G01N33/483 G01N33/49 G01N33/52 G01N33/53 G01N33/543 G01N33/558 G01N33/566 G01N33/86 G01N37/00		
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摘要(译)

医学诊断装置具有非吸收性基底，该基底具有亲水性靶区域，通过微滴的非冲击印刷在其上沉积试剂。在沉积期间，装置相对于微滴流移动，以在基板上形成基本均匀的试剂层。该装置特别适用于测量血液凝固时间。在一个优选的实施方案中，凝结时间通过监测光通过目标区域的光传输来确定，因为所施加的血液样品与试剂相互作用。

Fig. 8

