



US008930209B2

The Director of the United States Patent and Trademark Office

Has received an application for a patent for a new and useful invention. The title and description of the invention are enclosed. The requirements of law have been complied with, and it has been determined that a patent on the invention shall be granted under the law.

Therefore, this

United States Patent

Grants to the person(s) having title to this patent the right to exclude others from making, using, offering for sale, or selling the invention throughout the United States of America or importing the invention into the United States of America, and if the invention is a process, of the right to exclude others from using, offering for sale or selling throughout the United States of America, or importing into the United States of America, products made by that process, for the term set forth in 35 U.S.C. 154(a)(2) or (c)(1), subject to the payment of maintenance fees as provided by 35 U.S.C. 41(b). See the Maintenance Fee Notice on the inside of the cover.

Michelle K. Lee

Deputy Director of the United States Patent and Trademark Office

The United States of America



(12) **United States Patent**
Biedermann

(10) **Patent No.:** **US 8,930,209 B2**

(45) **Date of Patent:** **Jan. 6, 2015**

(54) **INDIVIDUAL ASSESSMENT AND CLASSIFICATION OF COMPLEX DISEASES BY A DATA-BASED CLINICAL DISEASE PROFILE**

(52) **U.S. Cl.**
USPC 705/2; 705/3

(58) **Field of Classification Search**
USPC 705/2, 3
See application file for complete search history.

(76) Inventor: **Barbara Biedermann**, Basel (CH)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 1006 days.

(56) **References Cited**

U.S. PATENT DOCUMENTS

6,369,952 B1 *	4/2002	Rallison et al.	359/630
7,369,952 B2 *	5/2008	Petrich et al.	702/76
7,381,819 B2 *	6/2008	Min et al.	536/24.5
2003/0176931 A1 *	9/2003	Pednault et al.	700/31
2004/0115735 A1 *	6/2004	Yusuf et al.	435/7.1
2006/0111849 A1 *	5/2006	Schadt et al.	702/20

* cited by examiner

Primary Examiner — Neha Patel

(74) *Attorney, Agent, or Firm* — Browdy and Neimark, PLLC

(21) Appl. No.: **12/296,363**

(22) PCT Filed: **Apr. 5, 2007**

(86) PCT No.: **PCT/IB2007/000917**

§ 371 (c)(1),
(2), (4) Date: **Dec. 31, 2008**

(87) PCT Pub. No.: **WO2007/116295**

PCT Pub. Date: **Oct. 18, 2007**

(65) **Prior Publication Data**

US 2009/0119337 A1 May 7, 2009

Related U.S. Application Data

(60) Provisional application No. 60/744,460, filed on Apr. 7, 2006.

(51) **Int. Cl.**
G06Q 10/00 (2012.01)
G06Q 50/00 (2012.01)

(57) **ABSTRACT**

An tool and method is disclosed to assess disease activity and to classify complex diseases using basic clinical data. The tools and methods allow identifying and consulting affected individuals based on comprehensive bedside examinations and thus provide a basis for the personalized management of complex diseases.

12 Claims, 11 Drawing Sheets

