



US008855741B2

(12) **United States Patent**
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(10) **Patent No.:** US 8,855,741 B2

(45) **Date of Patent:** Oct. 7, 2014

(54) **METHOD AND APPARATUS FOR ACQUIRING AN IMAGE BIOMARKER AND PROGNOSING A BLOOD RELATED DISEASE**

(56) **References Cited**

PUBLICATIONS

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 1111 days.

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(21) Appl. No.: 12/711,089

(22) Filed: Feb. 23, 2010

(65) **Prior Publication Data**

US 2011/0066024 A1 Mar. 17, 2011

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(30) **Foreign Application Priority Data**

Sep. 17, 2009 (TW) 98131362 A

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(51) **Int. Cl.**
A61B 5/05 (2006.01)
G06T 7/00 (2006.01)
A61B 5/055 (2006.01)
G06T 19/00 (2011.01)
G01R 33/56 (2006.01)

(57) **ABSTRACT**

A method of acquiring an image biomarker suitable for prognosis of a blood-related disease, such as acute myeloid leukemia, includes the steps of: (a) acquiring physical parameter sets, each including at least two parameters, respectively from time-signal intensity curves, these curves being respectively obtained from magnetic resonance image sets of different subjects; each of the image sets being acquired through MRI scanning using one of first and second configuration parameter sets; (b) analyzing the physical parameter sets thus acquired and (c) establishing a risk score function that is a sum of products of each of the physical parameters and the corresponding weight value, wherein a risk score obtained using the risk score function serves as the image biomarker suitable for prognosis of the blood-related disease.

(52) **U.S. Cl.**
CPC G06T 7/0014 (2013.01); G06T 2207/10096 (2013.01); G01R 33/5601 (2013.01); A61B 5/055 (2013.01); G06T 2207/20081 (2013.01); G06F 19/321 (2013.01); G06F 19/3431 (2013.01); G06T 2207/30104 (2013.01); G06T 2207/30096 (2013.01); G06F 19/345 (2013.01)
USPC 600/411; 600/407; 600/410; 600/416; 600/419; 600/420

(58) **Field of Classification Search**
CPC A61B 5/055; G01R 33/5601
USPC 600/407, 410, 411, 416, 419, 420
See application file for complete search history.

19 Claims, 13 Drawing Sheets

