

(12) **United States Patent**
Simonsen et al.

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(54) **METHOD OF MANAGING ERROR RISK IN LANGUAGE TRANSLATION**

(58) **Field of Classification Search** 704/1, 2-9, 704/231, 251, 277; 715/256
See application file for complete search history.

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(56) **References Cited**

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U.S. PATENT DOCUMENTS

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 1079 days.

5,768,603	A *	6/1998	Brown et al.	704/9
6,154,720	A *	11/2000	Onishi et al.	704/2
7,624,027	B1 *	11/2009	Stern et al.	705/2
7,653,531	B2 *	1/2010	Sneddon et al.	704/10
7,716,037	B2 *	5/2010	Precoda et al.	704/2
2002/0111787	A1 *	8/2002	Knyphausen et al.	704/2
2002/0169592	A1 *	11/2002	Aityan	704/2
2004/0193870	A1 *	9/2004	Redlich et al.	713/154
2006/0100850	A1 *	5/2006	Lee	704/8
2006/0136824	A1 *	6/2006	Lin	715/531
2007/0294076	A1 *	12/2007	Shore et al.	704/2

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* cited by examiner

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(57) **ABSTRACT**

Methods for analyzing, evaluating, and controlling risk of errors in language translation of medical device labeling are disclosed. The disclosed methods include identifying the risk level of the device; identifying the safety function(s) of the content that is translated; evaluating risks associated with the translation process; and analyzing this risk information and applying it in the selection of resources and in the design and execution of processes, to effectively mitigate the risk of safety related translation errors in labeling for medical devices.

12 Claims, 8 Drawing Sheets

