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# EXHIBIT A



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

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(54) **SYSTEMS AND METHODS FOR CREATING MUSIC VIDEOS SYNCHRONIZED WITH AN AUDIO TRACK**

7,027,124 B2 4/2006 Foote et al.  
7,301,092 B1 11/2007 McNally et al.  
7,500,176 B2 3/2009 Thomson et al.  
8,046,688 B2 10/2011 Adams et al.  
8,244,103 B1 \* 8/2012 Shore ..... G11B 27/34  
386/278  
8,271,872 B2 9/2012 Salvucci  
8,704,069 B2 \* 4/2014 Naik ..... G10H 1/40  
84/612  
8,896,609 B2 11/2014 Xu et al.  
(Continued)

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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 43 days.

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(65) **Prior Publication Data**

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(51) **Int. Cl.**  
**H04N 5/93** (2006.01)  
**G11B 27/031** (2006.01)  
**H04N 9/82** (2006.01)  
**G11B 27/34** (2006.01)  
**H04N 21/43** (2011.01)  
**H04N 21/8547** (2011.01)

(52) **U.S. Cl.**  
CPC ..... **G11B 27/031** (2013.01); **G11B 27/34** (2013.01); **H04N 9/8211** (2013.01); **H04N 21/4307** (2013.01); **H04N 21/8547** (2013.01)

(58) **Field of Classification Search**  
CPC ... G11B 2220/90; G11B 27/034; G11B 27/34; G11B 27/024; G11B 27/036  
USPC ..... 386/285  
See application file for complete search history.

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

5,265,248 A 11/1993 Moullos et al.  
7,026,536 B2 4/2006 Lu et al.

**OTHER PUBLICATIONS**

Musicstory: A personalized Music Video Creator; David A. Shamma, Bryan Paredo, Kristian J. Hammond; Proceedings of the 13th Annual ACEM International Conference on Multimedia; ACM, 2005.

(Continued)

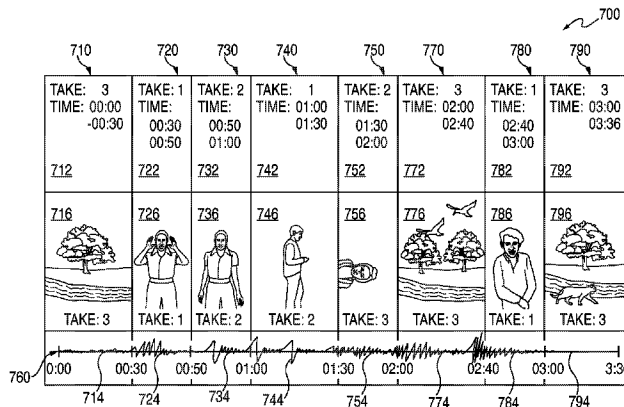
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(57) **ABSTRACT**

Systems and methods for creating music videos synchronized with an audio track are provided. In some embodiments, an audio track may be selected and one or more video takes may be captured while the selected audio track plays. The video takes may be analyzed while they are captured to determine, for example, a video intensity level and/or a number of faces recognized within each take. By capturing the video takes with the audio track, the video takes may be synchronized to the audio tracks so that they are in time with one another. Portions or subsets of the video takes may be paired or matched with certain sections of the audio track based on, for example, the audio characteristics for a particular section and video characteristics of a particular take.

**19 Claims, 17 Drawing Sheets**



## US 9,691,429 B2

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(56)

## References Cited

## U.S. PATENT DOCUMENTS

2002/0035475	A1*	3/2002	Yoda .....	G10L 15/24 704/270
2004/0060070	A1	3/2004	Mizushima	
2005/0143915	A1*	6/2005	Odagawa .....	G08G 1/0962 701/443
2005/0190199	A1	9/2005	Brown et al.	
2006/0288849	A1*	12/2006	Peeters .....	G10H 1/0008 84/616
2008/0037953	A1*	2/2008	Kawamura .....	H04N 5/783 386/343
2008/0055469	A1*	3/2008	Miyasaka .....	G10H 1/368 348/521
2009/0164034	A1	6/2009	Cohen et al.	
2010/0290538	A1	11/2010	Xu et al.	
2012/0316660	A1	12/2012	Luo et al.	
2013/0330062	A1*	12/2013	Meikle .....	H04N 9/87 386/285
2014/0160250	A1*	6/2014	Pomerantz .....	H04N 5/23229 348/47
2014/0317480	A1	10/2014	Chau et al.	
2014/0320697	A1	10/2014	Lammers et al.	
2015/0050009	A1*	2/2015	Svensen .....	G11B 27/036 386/280

## OTHER PUBLICATIONS

Creating Music Videos Using Automatic Media Analysis; Jonathan Foote, Matthew Cooper, and Andreas Girgensohn; Proceedings of the 10th International Conference on Multimedia; ACM, 2002.

MuViSync: Realtime Music Video Alignment; R. Macrae, X. Anguera, N. Oliver; 2010 IEEE International Conference on Multimedia and Expo (ICME), 534-9, 2010; ISBN-13: 978-1-4244-7491-2; DOI: 10.1109/ICME.2010.5583863; Conference: 2010 IEEE International Conference on Multimedia and Expo (ICME), Jul. 19-23, 2010, Suntec City, Singapore; Publisher: IEEE, Piscataway, NJ, US.

Cati Dance: Self-Edited, Self-Synchronized Music Video; Tristan Jehan, Michael Lew, and Cati Vaucelle; ACM SIGGRAPH 2003 Sketches & Applications. ACM, 2003.

Dubsmash by Mobile Motion GmbH; <https://itunes.apple.com/app/dubsmash/id918820076> retrieved on May 11, 2015.

Video Star by Frontier Design Group; <https://itunes.apple.com/us/app/video-star/id438596432?mt=8> retrieved on May 11, 2015.

\* cited by examiner

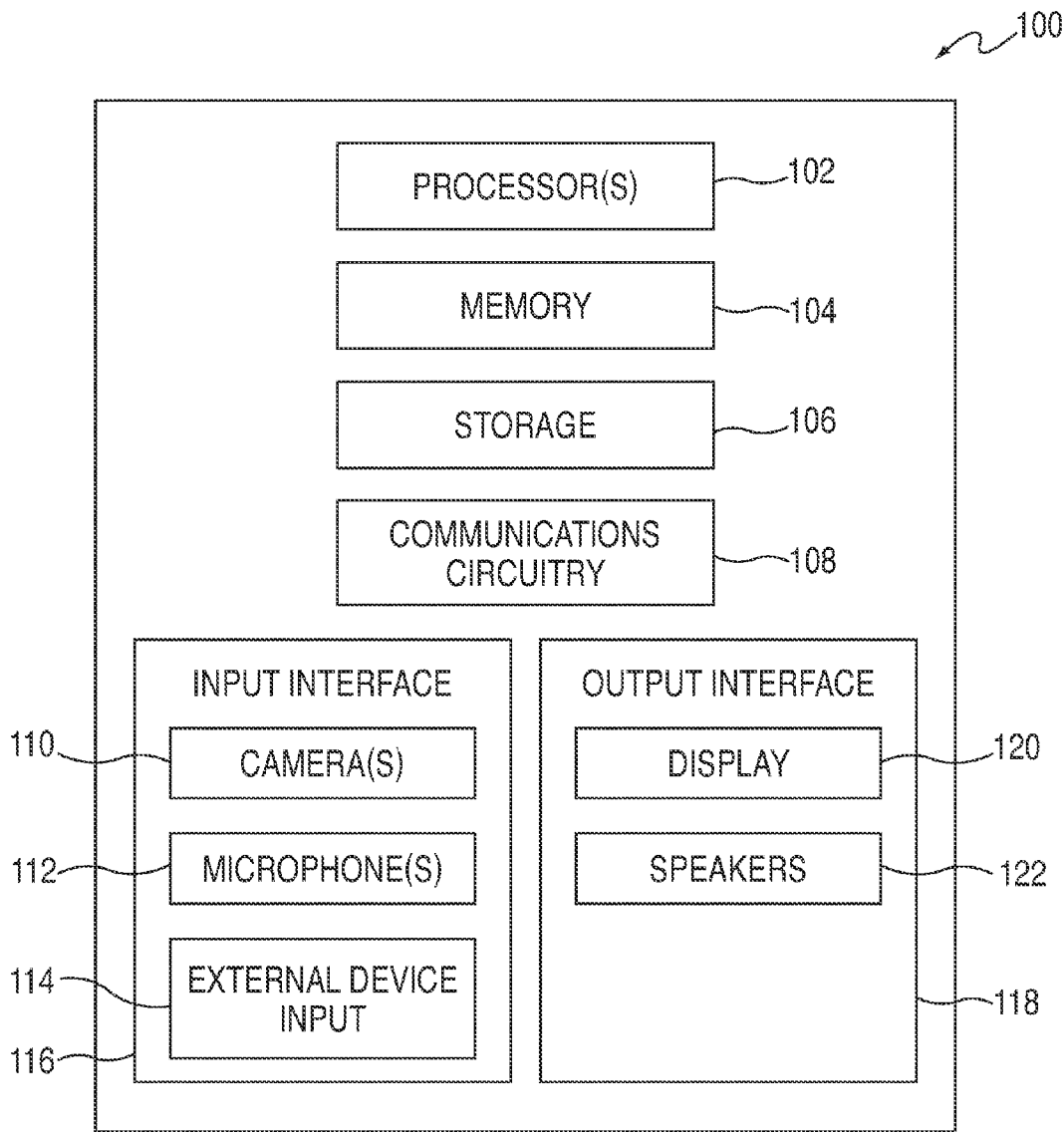


FIG. 1

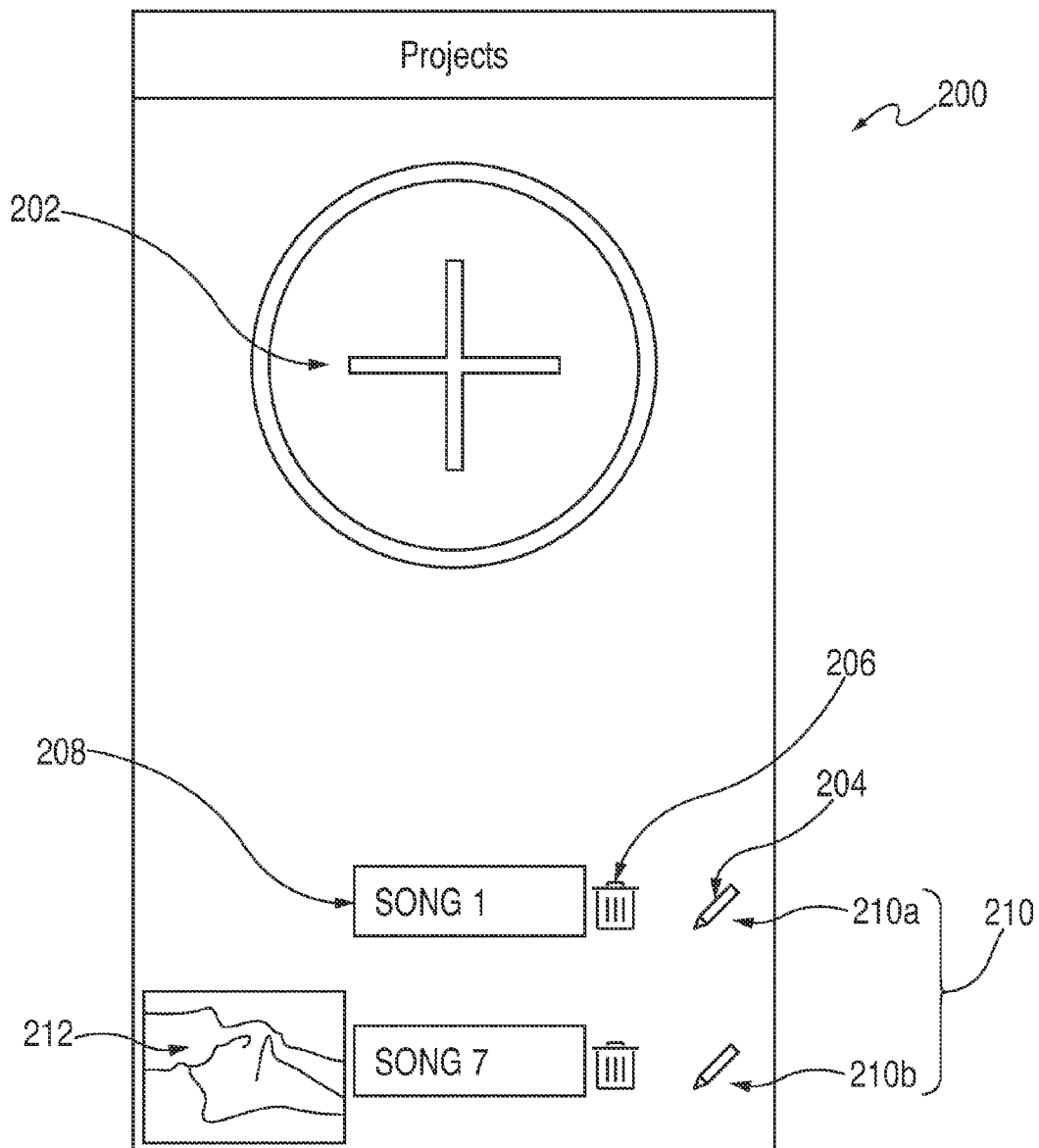


FIG. 2

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