504727330 01/12/2018

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:		NEW ASSIGNMENT		
NATURE OF CONVEYANCE:		ASSIGNMENT	ASSIGNMENT	
CONVEYING PARTY	DATA			
		Name	Execution Date	
TIMOTHY JOHN MICHAEL WARREN		REN	01/11/2018	
	DATA			
Name:	HARMO	HARMONIC, INC.		
Street Address:	4300 NC	4300 NORTH FIRST STREET		
City:	SAN JO	SAN JOSE		
State/Country:	CALIFO	CALIFORNIA		
Postal Code:	95134	95134		
Application Number	• 1	5699544		
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ASSIGNMENT

WHEREAS I, **TIMOTHY JOHN MICHAEL WARREN**, have made a certain new and useful invention as set forth in a patent application for United States Letters Patent Serial No. 15/699,544, entitled USING WEB-BASED PROTOCOLS TO ASSIST GRAPHIC PRESENTATIONS IN DIGITAL VIDEO PLAYOUT, filed on September 8, 2017;

AND WHEREAS, **Harmonic**, **Inc.**, a Delaware corporation having an address of 4300 North First Street, San Jose, California 95134, is desirous of acquiring the entire right, title and interest in and to said invention and in and to any and all Letters Patent of the United States and foreign countries which may be obtained therefrom;

NOW, THEREFORE, for good and valuable consideration, the receipt for and sufficiency of which is hereby acknowledged, I do hereby sell, assign, transfer and set over unto **Harmonic**, **Inc.**, its legal representatives, successors, and assigns ("Assignee"), the entire right, title and interest in and to said invention as set forth in the above-mentioned application, including any provisionals, non-provisionals, continuations, continuations-inpart, divisions, reissues, re-examinations or extensions thereof, and in and to any and all patents of the United States and foreign countries which may be issued for said invention;

UPON SAID CONSIDERATIONS, I hereby agree with the said Assignee that I will not execute any writing or do any act whatsoever conflicting with these presents, and that I will, at any time upon request, without further or additional consideration but at the expense of said Assignee, execute such additional assignments and other writings and do such additional acts as said Assignee may deem necessary or desirable to perfect the Assignee's enjoyment of this grant, and render all necessary assistance in making application for and obtaining any provisional, non-provisional, original, divisional, continuations, continuations-in-part, reexamined, reissued, or extended Letters Patent of the United States or of any and all foreign countries on said invention, and in enforcing any rights or chooses in action accruing as a result of such applications or patents, by giving testimony in any proceedings or transactions involving such applications or patents, and by executing preliminary statements and other affidavits, it being understood that the

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PATENT REEL: 045064 FRAME: 0917

foregoing covenant and agreement shall bind, and inure to the benefit of the assigns and legal representatives of assignor and Assignee;

AND I REQUEST the Commissioner of Patents and Trademarks to issue any Letters Patent of the United States which may be issued for said invention to said Assignee, its legal representatives, successors or assigns, as the sole owner of the entire right, title and interest in and to said patent and the invention covered thereby.

11-01-2018

Tim Warren

Date

TIMOTHY JOHN MICHAEL WARREN