UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

ROKU, INC., Petitioner,

v.

UNIVERSAL ELECTRONICS INC., Patent Owner.

Case IPR2019-01614 U.S. Patent 9,911,325

DECLARATION OF DR. MICHAEL D. SPRENGER IN SUPPORT OF PATENT OWNER'S RESPONSE TO PETITION FOR *INTER PARTES* REVIEW OF U.S. PATENT NO. 9,911,325



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	Applicant distinguished translating or converting a control signal from "receiveystroke indicator signal" and then "generating a key code within a key code generative using the keystroke indicator signal"	ator
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В	G	Ground 1: Rye and Skerlos	46
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	2.	Rye and Skerlos do not render obvious Claim 1	52
	a. and t	Rye and Skerlos do not disclose [1.3]: "a processing device coupled to the receiver the transmitter"	
	b. the p	Rye and Skerlos do not disclose [1.4]: "a memory storing instructions executable b processing device, the instructions causing the processing device to"	
	recei	Rye and Skerlos do not disclose [1.4.1]: "generate a key code using a keystroke eator received from a third device in communication with first device via use of the ever, the keystroke indicator having data that indicates an input element of the third ce that has been activated"	58
	d.	Rye and Skerlos do not disclose [1.4.2]: "format the key code for transmission to the device"	
	e. secon	Rye and Skerlos do not disclose [1.4.3]: "transmit the formatted key code to the nd device in a key code signal via the use of a transmitter"	68
f. Rye and Skerlos do not disclose [1.4.4]: "wherein the generated key come of a plurality of key code data stored in a codeset, wherein the one of the key code data is selected from the codeset as a function of the keystroke indiffrom the third device, wherein each of the plurality of key code data stored is comprises a series of digital ones and/or digital zeros"			f ed t
	the p	Rye and Skerlos do not disclose [1.4.5]: "wherein the codeset further comprises ting mation that describes how a digital one and/or a digital zero within the selected one plurality of key code data is to be represented in the key code signal to be transmitted econd device"	of l to
	3. 1, wl	Rye and Skerlos do not render obvious Claim 2: "The first device as recited in claim the receiver comprises an RF receiver"	
	4. 1, wl	Rye and Skerlos do not render obvious Claim 3: "The first device as recited in claim therein the transmitter comprises an IR transmitter"	
	-	Rye and Skerlos do not render obvious Claim 5: "The first device as recited in claim herein the formatted key code is transmitted from the first device to the second device wireless connection between the first device and the second device"	ce
		Rye and Skerlos do not render obvious Claim 7: "The first device as recited in claim therein the generated key code controls at least one of a power on, power off, volume and volume down functional operation of the second device"	•
C.	G	Ground 2: Caris and Dubil	77
	1.	A POSITA would not have combined Caris with Dubil	77
	2	Copie and Dukil do not random abytique Claim 1.	02



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a. Caris and Dubil do not disclose [1.3]: "a processing device coupled to the receiver and the transmitter"
b. Caris and Duil do not disclose [1.4]: "a memory storing instructions executable by the processing device, the instructions causing the processing device to"
c. Caris and Dubil do not disclose [1.4.1]: "generate a key code using the keystroke indicator received from a third device in communication with first device via use of the receiver, the keystroke indicator having data that indicates an input element of the third device that has been activated"
d. Caris and Dubil do not disclose [1.4.2]: "format the key code for transmission to the second device"
e. Caris and Dubil do not disclose [1.4.3]: "transmit the formatted key code to the second device in a key code signal via the use of a transmitter"
f. Caris and Dubil do not disclose [1.4.4]: "wherein the generated key code comprises a one of a plurality of key code data stored in a codeset, wherein the one of the plurality of key code data is selected from the codeset as a function of the keystroke indicator received from the third device, wherein each of the plurality of key code data stored in the codeset comprises a series of digital ones and/or digital zeros"
g. Caris and Dubils do not disclose [1.4.5]: "wherein the codeset further comprises time information that describes how a digital one and/or a digital zero within the selected one of the plurality of key code data is to be represented in the key code signal to be transmitted to the second device"
3. Caris and Dubil do not render obvious Claim 2: "The first device as recited in claim 1, wherein the receiver comprises an RF receiver"
4. Caris and Dubil do not render obvious Claim 3: "The first device as recited in claim 1, wherein the transmitter comprises an IR transmitter"
5. Caris and Dubil do not render obvious Claim 4: "The first device as recited in claim 1, wherein the formatted key code is transmitted from the first device to the second device via a wired connection between the first device and the second device"
6. Caris and Dubil do not render obvious Claim 5: "The first device as recited in claim 1, wherein the formatted key code is transmitted from the first device to the second device via a wireless connection between the first device and the second device"
CONCLUSION



X.

I, Michael D. Sprenger, declare that:

I. INTRODUCTION

- 1. I have been retained by Universal Electronics Inc., which I may refer to as either the "Patent Owner" or "UEI," for this *inter partes* review proceeding, which I may refer to as an "IPR." I understand that this IPR proceeding involves U.S. Patent No. 9,911,325, which I may refer to as "the '325 patent" for shorthand. I understand that the claims challenged in this IPR are Claims 1-5 and 7 of the '325 patent.
 - 2. I understand that the '325 patent is assigned to UEI.
- 3. I understand that in this proceeding Roku, Inc., which I may also refer to as the "Petitioner," filed a Petition for review of Claims 1-5 and 7 of the '325 patent.
- 4. I understand that the above claims are challenged on the following three grounds:

Claims Challenged	Basis	References
1-3, 5, 7	Obviousness	Ground 1: Rye, Skerlos
1-5	Obviousness	Ground 2: Caris, Dubil

5. I have been asked to provide my objective, independent analysis of the '325 patent in view of the asserted prior art references cited in the Petition and to provide my opinion regarding the allegations in the Petition, as well as the supporting opinions of Dr. Samuel H. Russ.



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