UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE PATENT TRIAL AND APPEAL BOARD ROKU, INC., Petitioner, v. UNIVERSAL ELECTRONICS, INC., Patent Owner. Case No. IPR2020-01012 U.S. Patent 7,589,642

DECLARATION OF DR. SAMUEL H. RUSS

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2.	[1.1] "receiving a keystroke indicator signal from a remote control device wherein the keystroke indicator signal indicates a key on said remote control device that a user has selected;"	
3.	[1.2] "generating a key code within a key code generator device using the keystroke indictor signal;"	
4.	[1.3] "modulating said key code onto a carrier signal, thereby generating key code signal; and"	
5.	[1.4] "transmitting said key code signal from said key code generator device to said remote control device."	67
Ι	O. Claim 369	
1.	"The method of claim 1, wherein said key code consists of a binary number."	69
E	E. Claim 470	
1.	"The method of claim 1, wherein said key code comprises a binary number and timing information, and wherein said timing information defines how said binary number is modulated in (c) onto said carrier signal."	70
F	F. Claim 6	
1.	[6.P] "The method of claim 1, wherein said carrier signal is in a radio frequency band, wherein said key code signal is received by said remote control device, and wherein said method further comprises:"	
2.	[6.1] "modulating said key code onto a second carrier signal, thereby generating a second key code signal, said modulating being performed o said remote control device wherein said second carrier signal is in an infrared frequency band; and"	
3.	[6.2] "transmitting said second key code signal from said remote control device to an electronic consumer device."	



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(G. C	Claim 8	
1.	a cod	method of claim 1, wherein said key code generated in (b) is part leset, and wherein said remote control device does not store said set."	
ŀ	H. C	Claim 981	
1.	infori	method of claim 8, wherein said codeset comprises timing mation and a plurality of key codes, and wherein said timing mation describes a digital one and a digital zero."	81
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(C. In	ndependent Claim 2	
1.	[2.P]	"A method comprising:"	88
2.	where	"receiving a keystroke indicator signal from a remote control deve ein the keystroke indicator signal indicates a key on said remote ol device that a user has selected;"	
3.		"generating a key code within a key code generator device using roke indictor signal;"	
4.		"modulating said key code onto a carrier signal, thereby generation ode signal; and"	_
5.		"transmitting said key code signal from said key code generator e to an electronic consumer device."	97
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1.		method of claim 2, wherein said key code consists of a binary per."	98
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	1.	a co	ne method of claim 2, wherein said key code generated in (b) is part of odeset, and wherein said remote control device does not store said leset."
	G	i.	Claim 25105
	1.	info	ne method of claim 24, wherein said codeset comprises timing ormation and a plurality of key codes, and wherein said timing ormation describes a digital one and a digital zero."
IX.		Unj	ound 3: Claims 1, 2, 3, 4, 6, 8, 9, and 22-25 of the '642 Patent are patentable under 35 U.S.C. § 103 over Caris In View of erlos
	A	٠.	Caris in view of Skerlos discloses Embodiment 1111
	В	•	Caris in view of Skerlos discloses Embodiment 2117
	C	•	Independent claim 1
	1.	[1.F	P] "A method comprising:"
	wherein the keystroke indicator signal indicates a		[1] "receiving a keystroke indicator signal from a remote control device, erein the keystroke indicator signal indicates a key on said remote atrol device that a user has selected;"
	3.		2] "generating a key code within a key code generator device using the stroke indictor signal;"
	4.		3] "modulating said key code onto a carrier signal, thereby generating a code signal; and"
	5.		[4] "transmitting said key code signal from said key code generator vice to said remote control device."
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	1.		ne method of claim 1, wherein said key code consists of a binary mber."127
	Е	•	Claim 4: "The method of claim 1, wherein said key code comprises a binary number and timing information, and wherein said timing information defines how said binary number is modulated in (c) onto said carrier signal."
	F	•	Claim 6131
	1.	frec	P] "The method of claim 1, wherein said carrier signal is in a radio quency band, wherein said key code signal is received by said remote atrol device, and wherein said method further comprises:"



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