IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
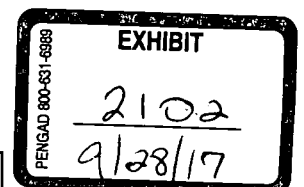
In re Patent of: Aaron B. Sternberg
U.S. Patent No.:   8,894,066
Issue Date: November 25, 2014
Appl. Serial No.:   14/155,013
Filing Date: January 14, 2014
Title: METHOD OF FACILITATING USER PREFERENCE IN CREATIVE DESIGN OF A CONTROLLER

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Patent Trial and Appeal Board
U.S. Patent and Trademark Office
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PETITION FOR *INTER PARTES* REVIEW OF UNITED STATES PATENT NO. 8,894,066 PURSUANT TO 35 U.S.C. §§ 311–319, 37 C.F.R. § 42

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B3 Gasperi's Mindstorms RCX Sensor Input Page, www.plazaearth.com/usr/gasperi/lego.htm

B4 U.S. Patent No. 6,443,796 to Shackelford

B5 U.S. Patent Publication No. 2002/0196250 to Anderson et al.

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Rubicon Communications, LP ("Petitioner") petitions for *Inter Partes* Review ("IPR") under 35 U.S.C. §§ 311–319 and 37 C.F.R. § 42 of claims 1-8 of U.S. Patent No. 8,894,066 (the "'066 patent"), entitled "Method of Facilitating Preference in Creative Design of a Controller," which is assigned to Lego Systems A/S ("Patent Owner"). As discussed in further detail below, there is a reasonable likelihood that Petitioners will prevail with respect to at least one claim challenged herein.

I. Mandatory Notices Under 37 C.F.R. § 42.8(a)(1)

A. Real Party-In-Interest Under 37 C.F.R. § 42.8(b)(1)

Petitioner, Rubicon Communications, LP is the real party-in-interest.

B. Related Matters Under 37 C.F.R. § 42.8(b)(2)

Patent Owner filed an action against Petitioner, alleging infringement of the '066 patent. *Lego Systems A/S v. Rubicon Communications, LP dba Smallworks and Smallworks, LLC*, Case No. 3:15-cv-00823 (VLB) (D. Connecticut), filed June 10, 2015) ("the Litigation").

C. Designation of Counsel Under 37 C.F.R. § 42.8(b)(3)

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D.   Service Information Under 37 C.F.R. § 42.8(b)(4)

Please address all correspondence and service to counsel at the address

provided above.

II.   Payment of Fees – 37 C.F.R. § 42.103

The Petitioners authorize the Patent and Trademark Office to charge the fee

set out in 37 C.F.R. § 42.15(a) for this Petition and any additional fees that may be

required, or credit any overpayment, to Deposit Account No. 501505/5805-

04211/EBM.

III.   Requirements for IPR under 37 C.F.R. § 42.104

A.   Grounds for Standing Under 37 C.F.R. § 42.104(a)

Petitioner certifies that the '066 patent is available for IPR and that

Petitioner is not barred or estopped from requesting IPR on the grounds identified

herein.

B.   Challenge Under 37 C.F.R. § 42.104(b) and Relief Requested

Petitioner requests IPR of claims 1-8 of the '066 patent on the grounds set

forth in the table below and requests that each of these claims be found

unpatentable.

Ground	'066 Patent Claims	Basis for Rejection
Ground 1	1-6, 8	Anticipated under § 102(b) by "Building

		Robots with Lego Mindstorms" by Mario Ferrari et al. ("*Building Robots*"), front and back covers, Table of Contents, Preface, Foreword, Chapters 4, 6, 9, 13, 16, 17, 18 and Appendix A (Exhibit B1)
Ground 2	1-8	Obvious under § 103(a) in view of *Building Robots*, portions cited in Ground 1 and Chapter 26.
Ground 3	1-6, 8	Anticipated under § 102(b) by "Philo's Home Page" website ("Philo") (Exhibit B2)
Ground 4	1-8	Obvious under § 103(a) in view of *Philo* in combination with *Building Robots*
Ground 5	2-4	Obvious under § 103(a) in view of *Philo* in combination with *Building Robots* and *Gasperi's Mindstorms Sensor Input Page* (Exhibit B3)
Ground 6	1-4, 6, and 8	Anticipated under § 102(b) by U.S. Patent No. 6,443,796 to Shackelford (Exhibit B4)
Ground 7	1-4, 6, and 8	Anticipated under § 102(b) by U.S. Patent Publication No. 2002/0196250 to Anderson

		et al. (Exhibit B5)
Ground 8	8	Obvious under § 103(a) in view of Anderson in combination with *Xbox Forums* (Exhibit B6)

Further explanation of why these claims are unpatentable under the statutory grounds identified above is provided below in section VI, identifying where each element is found in the cited prior art, and the relevance of that prior art. Section V below sets out how each challenged claim is to be construed.

IV. Summary of the '066 Patent

A.   Overview

A.   Description of the Alleged Invention of the '066 Patent

The alleged invention of the '066 patent relates to a method of facilitating user preference in creative design of a controller for manipulating images or symbols on a display. The controller having a housing with an exterior surface and an interior region confining electrical components for producing signals for manipulating image or symbols on the display. Ex. A1, 2:66 – 3:17. The method includes providing a main casing configured to conformably fit around a portion of the exterior surface of and thereby receive the housing of the controller. Ex. A1, 2:66 – 3:17. The main casing having a patterned surface portion configured to

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support a set of building elements that are configurable for mating to the patterned surface portion. Ex. A1, 2:66 – 3:34. The patterned surface includes a surface pattern in the form of an array of mutually spaced-apart cylindrical mating features or recesses. Ex. A1, 3:35 – 45. The building elements include left and right hand grips. Ex. A1, 3:17 – 34.

The method further includes providing in the set of building elements a subset of building elements that are matable to one another. The subset of building elements are configured for a user to build on the patterned surface portion of the main casing a customized replica of at least a portion of a play item. Ex. A1, 3:46 – 4:5. Building a customized replica of a portion of a play item purportedly transforms the exterior surface of the housing of the controller to a customized shape and appearance in accordance with the user's preference. Ex. A1, 4:51 – 5:3.

B.   Summary of the Prosecution History of the '066 Patent

Sternberg filed U.S. Patent Appl. No. 14/155,013 ("the '013 application") on January 14, 2014. Ex. A1. The '013 application is a continuation of Patent Appl. No. 13/347,414 filed on January 10, 2012, which issued as Patent No. 8,628,085 ("the '085 patent"). The '085 patent is a continuation of Patent Appl. No. 12/795,540, filed June 7, 2010, which issued as Patent No. 8,091,892 ("the '892 patent"). The '892 patent is a continuation of Patent Appl. No. 12/278,102, filed August 1, 2008, which issued as Patent No. 7,731,191 ("the '191 patent"). The

'191 patent is a 371 of PCT/US07/03462 ("the '462 application), filed February 9, 2007. The '462 application claims benefit of U.S. Provisional Patent Appl. No. 60/772,343, filed February 10, 2006. Ex. A1. The '013 application issued as the '066 patent on November 25, 2014. Ex. A1. The '066 patent names Aaron B. Sternberg as the purported inventor, and names IPPASA, LLC as the purported assignee. Ex. A1. The '066 patent was assigned by IPPASA, LLC to LEGO SYSTEMS A/S on December 6, 2014. The '066 patent was assigned by LEGO SYSTEMS A/S to LEGO A/S on September 21, 2015.

All of the claims (claims 1-6) were rejected in a first non-final office action ("the first action") issued on March 25, 2014. Ex. A2 at 93. Claims 1-6 were rejected for nonstatutory double patenting as being unpatentable over claims 1-8 of Patent No. 7,731,191, claims 1-6 of Patent No. 8,091,892, and claims 1-6 of Patent No. 8,628,085. Ex. A2 at 96. The nonstatutory double patenting rejections of claims 1-6 were overcome by the patentee filing an electronic terminal disclaimer on August 13, 2014. Ex. A2 at 101-104.

Additionally claims 1-6 were rejected under 35 U.S.C. 101 as being held to claim an abstract idea. The first action stated that the rational for this rejection was that the method claims are directed to a set of instructions and do not provide a sufficient recitation of a machine or transformation because the claims are only mere statements of a general concept. Ex. A2 at 94. The patentee responded to the

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first action by filing an Amendment/Request for Reconsideration After Non-Final Rejection ("the amendment") on September 24, 2014. Ex. A2 at 108-116. The patentee responded to the 101 rejection by amending claim 1 to recite at least in part "providing in the set of building elements a subset of building elements that are matable to one another and configured for a user to build on the patterned surface portion of the main casing a customized replica of at least a portion of a play item and thereby transform the exterior surface of the housing of the controller to a customized shape and appearance in accordance with the user's preference." In the amendment the patentee referenced a telephonic interview with Examiner Chiu conducted on August 26, 2014, in which the patentee purported to have discussed the amendment to claim 1. The patentee stated in the amendment that Examiner Chiu purportedly indicated the phrases "to build on" and "and [to] thereby transform" added to claim 1 recite activity that implements the process and, therefore, overcome the Section 101 rejection. Ex. A2 at 115.

The claims were allowed in a second action ("the second action") issued on October 3, 2014. Ex. A2 at 126-129.

V. Claim Construction under 37 C.F.R. §§ 42.104(b)(3)

In *inter partes* review, "A claim in an unexpired patent shall be given its broadest reasonable construction in light of the specification of the patent in which it appears." 37 C.F.R. § 42.100(b). There is no suggestion that the "broadest

reasonable construction" differs from the "broadest reasonable interpretation" (BRI) standard discussed in case law and the MPEP. Under this approach, the USPTO (or its reviewing court) "look[s] to the specification to see if it provides a definition for claim terms, but otherwise appl[ies] a broad interpretation." *In re Icon Health & Fitness, Inc.*, 496 F.3d 1374, 1379 (Fed. Cir. 2007). The BRI standard is broader than the standard applied during litigation, because the USPTO is not obliged to construe claims in order to preserve their validity. *In re Am. Acad. of Sci. Tech Ctr.*, 367 F.3d 1359, 1369 (Fed. Cir. 2004). Accordingly, when construed under BRI, a claim should encompass at least the same subject matter as when construed by a court, but may also encompass additional subject matter.

In proceedings before the USPTO, it is possible for a patentee to overcome the default BRI standard for a given claim term, but this requires that the patentee define the term using "expressions of manifest exclusion or restriction, representing a clear disavowal of claim scope." *In re Am. Acad. of Sci. Tech Ctr.*, 367 F.3d at 1365. "Absent claim language carrying a narrow meaning, the PTO should only limit the claim based on the specification or prosecution history when those sources expressly disclaim the broader definition." *In re Bigio*, 381 F.3d 1320, 1325 (Fed. Cir. 2004). Accordingly, under BRI, a claim should be construed to encompass at least what is suggested by the intrinsic record of a patent, but

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should be limited by the intrinsic record only in the presence of "express disclaim[er]" representing "clear disavowal" of a broader interpretation.

With regard to the following claim terms, Petitioner has been deliberately conservative in proposing constructions under the BRI standard. Accordingly, Petitioner submits that these claims should be construed at least broadly enough to encompass these proposed constructions. The fact that Petitioner has proposed these constructions does not mean that Petitioner is conceding that no broader construction of these terms is possible under the BRI standard.

i. **"building elements"**: For purposes of this Petition only, this term should be construed to include any component or objects that are configured for mating to a patterned surface portion and to one another. This construction is consistent with the term's usage in the intrinsic record of the '066 patent. *See, e.g.,* A1, Figs. 1-9; 1:20-65; 3:36-4:60, and 5:29-6:35.

ii. **"set of building elements"**: For purposes of this Petition only, this term should be construed to include a set of building elements which may include a subset of building elements. This construction is consistent with the term's usage in the intrinsic record of the '066 patent. *See, e.g.,* A1, Figs. 1-9; 1:20-65; 3:36-4:60, and 5:29-6:35.

iii. **"subset of building elements"**: For purposes of this Petition only, this term should be construed to include a group of building elements which do not

have the same functionality as other building elements in the set. This construction is consistent with the term's usage in the intrinsic record of the '066 patent.

Petitioner does not seek to have any of terms of the '066 Patent claims construed as means-plus-function or step-plus-function clauses.

VI. Grounds for Rejection

A. Rejections based on *Building Robots* as primary reference

1. Ground 1 – Building Robots anticipates claims 1-6 and 8

The following claim chart shows that *Building Robots* teaches each and every limitation of claims 1-4, 6 and 8 of the '066 patent, rendering those claims unpatentable under 35 U.S.C. § 102(b). *Building Robots* was not before the Examiner during prosecution of the '066 patent and, as such, did not form the basis of any ground of rejection, and is not mentioned in the prosecution history of the '066 patent.

Building Robots is book that teaches about building robots with Lego® MindstormsTM Robotics Invention System ("RIS"). *Building Robots* bears a copyright date of 2002. The Robotics Invention System enables builders to build creations that include the RCX "brick" control device combined with Lego play bricks and a multitude of other Lego elements to make robots and other items. See

Building Robots, front and back covers, page xxv. The RCX "brick" includes a processor, batteries, and other electric components houses in with a two-part plastic housing (a yellow top shell portion and gray bottom shell portion), and an electronic display and control buttons on the front. *See Building Robots*, pp. 98-99; p. 393, Figure 20.1, p. 79, Figure 4.15:
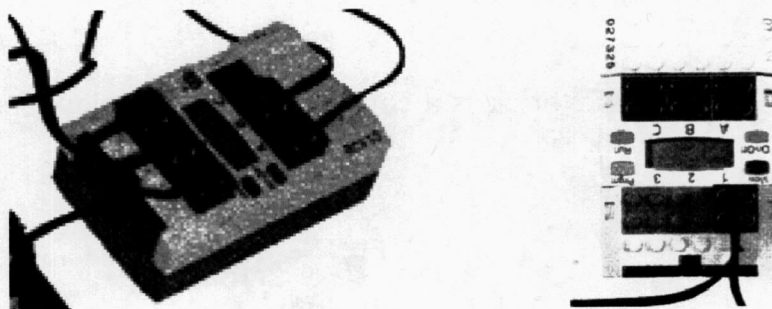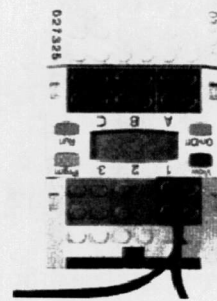

A portion of the front of housing of the RCX brick has an array of Lego studs. A portion of the rear of the housing of the RCX brick has a surface that couples with the studded surfaces found on numerous types of Lego parts. By way either or both of these front and rear surfaces, the RCX brick can be installed in, or coupled with, various assemblies and constructions of other Lego elements. *See*, for example, *Building Robots*, Figure 18.2:

Claim Language	Discussion
Claim 1 [1 preamble] A method of facilitating user preference in creative design of a	*Building Robots* discloses facilitating user preference in creative design of Lego constructions with the RCX brick. See *Building Robots*, back cover: "This book unleashes the full power and potential of the tools, bricks, and components that make up LEGO Mindstorms.". B1, p. 361, Figure 18.12:

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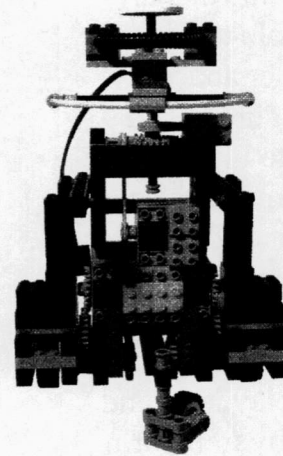|	
controller for manipulating images or symbols on a display, the controller having a housing with an exterior surface and an interior region confining electrical components for producing signals for manipulating image or symbols on the display, comprising:	 The RCX brick is a controller with a display, *See id.*, p. 79, Figure 4.15: *Building Robots* states: "The RCX is a computer... Its only gates to the external world are a small display, three input ports, three output ports, four push-buttons, and an infrared (IR) serial communication interface... the processor, an Hitachi H8300, which executes the machine code instructions. The processor cooperates with additional components that convert signals from the ports into digital data, using chips that provide memory for data and program storage." *Id.* at pp. 98-99. The RCX brick includes a two-part housing (yellow top shell, gray bottom shell) that has an exterior surface and an interior region confining electrical components that produce signals for manipulating images or symbols on the display. *Id.* at p. 393, Figure 20.1:
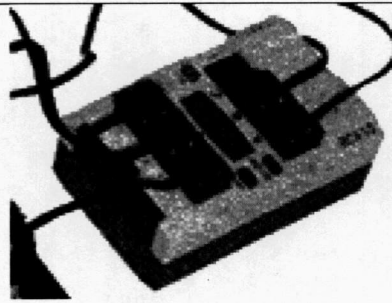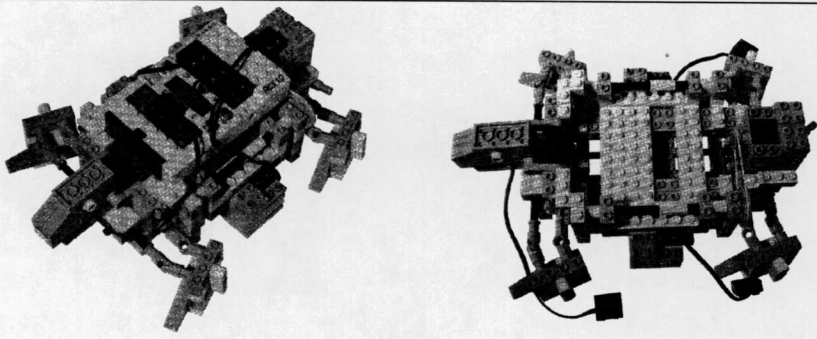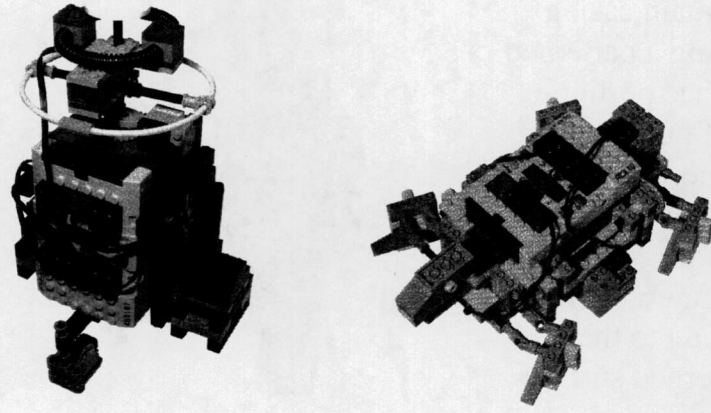
"What I could not know at that time is that 30 years later I would hold in the palm of my hand a microcontroller with more raw speed and memory than the one the astronauts used to get to the moon and back. That computer would be encased in yellow ABS plastic and would change the world of hobby and educational robotics." *Id.* at pp. xxv, lines 5-9.
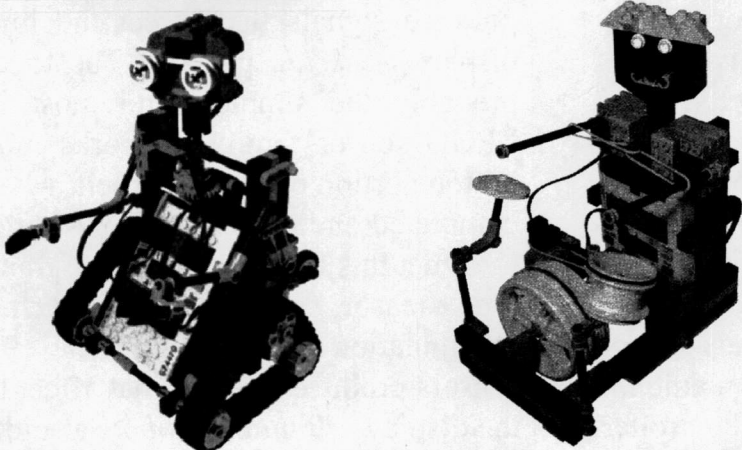
[1a] providing a main casing configured to conformably fit around a portion of the exterior surface of and thereby receive the housing of the controller, the main casing having a patterned surface portion configured to support a set of building elements that are configurable for mating to the patterned surface portion; and	main casing. *Building Robots* discloses a main casing that conformably fits around a portion of the exterior surface of the housing. See, for example, *Building Robots*, p. 351, Figure 18.1 (R2-D2-type robot with RCX brick installed), and p. 352, Figure 18.2 (the R2-D2-type robot with RCX brick removed from casing). See also Figures 17.8 (turtle robot with RCX brick installed) and 17.13 (the turtle robot with RCX brick removed from casing).
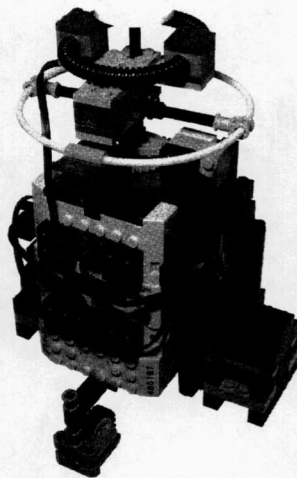
	patterned surface portion. The main casing has Lego elements with a patterned surface portion that supports a set of building elements that mate to the patterned surface portion. See, for example, *id.,* Figure 18.1 and 17.8 (above), in which Lego elements are stacked on Lego elements forming the portion of the casing that receives the RCX brick.
[1b] providing in the set of building elements a subset of building elements that are matable to one another and configured for a user to build on the patterned surface portion of the main casing a customized replica of at least a portion of a play item and thereby transform the exterior surface of the housing of the controller to a customized shape and appearance in accordance with	*Building Robots* discloses a subset of building elements that are matable to one another for a user to build on a patterned surface of the main casing a customized replica of a play item (e.g., robot, drum set). *See Building Robots*, Figures 18.1, 17.8, 18.12, and 21.1

the user's preference.	
Claim 2 The method of claim 1, further comprising control actuators operatively connected to the electrical components, the control actuators including a type of actuator that responds to user movement of the controller to produce the signals for manipulating the images or symbols.	*Building Robots* discloses control actuators in the form of rotation sensors. *Building Robots* further discloses that the rotation sensors are operatively connected to the electrical components of the RCX brick. The rotation sensors respond to user movement of the controller. The output of the rotation sensors produces signals that affect the images or symbols on the display. See Id., p. 71. "The rotation sensor returns four possible values that correspond to four states, let's call them A, B, C, and D. For every complete turn, it passes through the four states four times-that's why we get 16 counts per turn. Turning the sensor clockwise, it will read the sequence ABCDA..., while turning it counterclockwise will result in the sequence ADCBA.... The RCX polls the sensor frequently, and when it detects that the state has changed, it can not only deduce that the sensor has turned, but also tell in which direction it has turned."
Claim 3 The method of claim 2, in which the type of actuator is a motion sensor.	*Building Robots* discloses an actuator that is a type of motion sensor (see discussion of rotation sensor above with respect to claim 2.)
Claim 4 The method of claim 1, further comprising control	*Building Robots* discloses "touch sensors" that are operatively connected to electrical components of the RCX brick. The touch sensors are control actuators of a type that responds to tactile manipulation of the controller to

actuators operatively connected to the electrical components, the control actuators including a type of actuator that responds to user tactile manipulation of the controller to produce the signals for manipulating the images or symbols.	produce signals that affect the images or symbols on the display. *See id.*, p. 58. "The touch sensor (Figure 4.1) is probably the simplest and most intuitive member of the LEGO sensor family. It works more or less like the push button portion of your doorbell: when you press it, a circuit is completed and electricity flows through it. The RCX is able to detect this flow, and your program can read the state of the touch sensor, on or off". The touch sensors respond to tactile manipulation of the controller. The output of the touch sensors produces signals that affect the images or symbols on the display. *Building Robots* also discloses a touch sensor in the R2-D2 robot shown in Figure 18.1: "A touch sensor detects the central position of the head through the tip of the cam…" Id., p. 18:7-8.
Claim 5 The method of claim 1, further comprising a hand grip section having a patterned surface portion configured for operative connection to the main casing to provide a gripping portion on which the user can grasp during play activity.	*Building Robots* discloses robots and other constructions with a section having a patterned surface portion connected to its main casing and which the user can grasp during play activity, such as, for example, the shoulder of the R2-D2 robot shown in Figure 18.1, the shoulder of the robot shown in Figure 18.12, or the tail of the turtle shown in 17.8.
Claim 6 The method of claim 1, in which the set of building elements constitutes a first set of building elements, and further comprising providing a second	*Building Robots* discloses a set of building elements in the form of multiple components having matable and non-matable surfaces. The multiple components contribute to the building on the patterned surface portion of the main casing a customized replica of a portion of a play item. See, for example, Figure 18.1 (robot rings have matable and non-matable surfaces) and 21.1 (drum set elements has matable and non-matable surfaces)

set of building elements in the form of multiple components having matable and nonmatable surfaces, the matable surfaces configured to mate with building elements in the subset and the nonmatable surfaces configured to not mate with the patterned surface portion of the main casing or the first set of building elements, the multiple components of the second set of building elements contributing to the building on the patterned surface portion of the main casing a customized replica of at least a portion of a play item configured for use in play activity.	
Claim 8 The method of claim 1, in which the set of building elements includes a building element in	*Building Robots* discloses a building element in the form of a play item having a surface that is not matable to the patterned surface portion. See discussion relative to claim 6.

the form of a play item having a surface that is not matable to the patterned surface portion.	

2.   *Ground 2 – Building Robots renders obvious claims 1-8*

As to claims 1-6 and 8, Petitioner submits that *Building Robots* discloses every limitation of these claims for the reasons set forth in Ground 1 above. Petitioner further submits that *Building Robots* discloses these features within one or more particular anticipating embodiments. This ground of rejection is being introduced to foreclose a potential argument that *Building Robots* does not disclose all of the features "arranged or combined in the same way as in the claim[s]." *Net MoneyIN, Inc. v. Verisign, Inc.*, 545 F.3d 1359, 1370 (Fed. Cir. 2008). Accordingly, even supposing, for the sake of argument, that *Building Robots* failed to explicitly disclose that these features were combined within a single anticipating embodiment, the collective teachings of *Building Robots* nevertheless would be readily combinable by one of ordinary skill to yield the claimed subject matter, thus rending these claims unpatentable as obvious under 35 U.S.C. § 103. This is especially so given that a theme of *Building Robots* is the use of various teachings of book to make new creations rather than simply copy specific examples described in the book. For example, in its preface, *Building Robots* states: "   ."

Building Robots, p. xxxi, lines 17-33. Also, Building Robots has an entire Appendix that lists books, websites, and other resources for Mindstorms inventors, with accompanying summaries of what information is in each reference. *Building Robots*, Appendix A.

Claim 7 is directed to: "The method of claim 1, in which the controller comprises a cellular telephone and a control section, the cellular telephone being operationally responsive to user-entered commands that are delivered to the control section." *Building Robots* discloses a control section of a controller (see Building Robots, p. 99:3-100:2). *Building Robots* also discloses a communication link between the RCX brick and a personal computer (via infrared), by which information is passed. *See Building Robots*, p. 99:1-2; 100:17-19. Although Building Robots does not expressly disclose a cellular phone operationally responsive to user-entered commands that are delivered to the control section, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide a communication link between the control section of the RCX and a cellular telephone to allow users to interact with the RCX by a more portable device than a personal computer. Petitioner notes that *Building Robots* has, for example, an entire section (three chapters) devoted to participation in MINDSTORMS robotic contests and challenges, many of which involve meeting competitors at a competition site. See Building Robots, pp.514-516. In such

settings, small, portable devices to interact with the RCX brick would clearly be desirable.

B.   Rejections based on the *Philo* website as primary reference

1.   Ground 3 – Philo anticipates claims 1-6 and 8

The following claim chart shows that the *Philo's Home Page* web site at www.philohome.com ("Philo") teaches each and every limitation of claims 1-6 and 8 of the '066 patent, rendering those claims unpatentable under 35 U.S.C. § 102(b). *Philo* was not before the Examiner during prosecution of the '066 patent and, as such, did not form the basis of any ground of rejection, and is not otherwise mentioned in the prosecution history of the '066 patent.

Philo is an Internet home page and group of sub-pages available at www.philo.home more than one year prior to the earliest priority date of the '066 Patent. For purposes of this petition, the portions of the website are provided from the web page as of December 4, 2004. As with the *Building Robots* reference, *Philo* teaches about building robots with Lego[R] Mindstorms[TM] Robotics Invention System, with numerous constructions based on the RCX "brick" control device combined with Lego play bricks and other Lego elements. One sub-page accessible from the *Philo* home page, identified as "Lego Mindstorms & Lego Technic" ("Mindstorms/Technic page"), appears next to an image of the RCX brick. Clicking on the hyperlink for this sub-page took the user to a page with
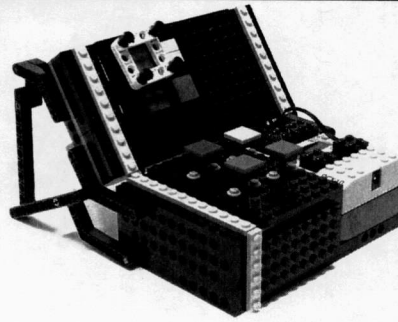
numerous constructions including the RCX brick, including a "Simon" memory game replica, cars, a see-saw, and robots.

Claim Language	Discussion
Claim 1 [1 preamble] A method of facilitating user preference in creative design of a controller for manipulating images or symbols on a display, the controller having a housing with an exterior surface and an interior region confining electrical components for producing signals for manipulating image or symbols on the display, comprising:	*Philo* discloses facilitating user preference in creative design of Lego constructions on the RCX brick. See *Philo,* Mindstorms page: "My own creations: …Card Reader… Radar Car … Brick Mixer … Wall Follower … Gonsuke and MedamaOyaji [robots], See-Saw … Creeping Caterpillar … Rack and Pinion Steering Car … Brick Simon, a memory game". See also, Brick Simon page and Rack and Pinion Steering Car page: *Philo* discloses the RCX brick as a programmable control device that includes a display. *Philo* discloses the RCX brick including a two-part housing (yellow top shell, gray bottom shell) that has an exterior surface and an interior region confining electrical components that produce signals for manipulating images or symbols on the display. See *Philo,* Brick Simon page: "1) Compile and download <u>Simon.nqc</u> in program slot 1, and <u>InitHighScore.nqc</u> in program slot 2. This can be done using

	BricxCC, you can get it from http://bricxcc.sourceforge.net. 2) Run program 2, this will initialize all high scores to 5, then automatically launch Brick Simon program (slot 1). This initialization should be performed only once to preserve high scores between runs, after that launch program 1 directly. 3) Brick Simon will first ask for the play difficulty level. RCX LCD shows a walking 1234 pattern, waiting for a key to be pressed.... A separate high score is kept for each difficulty level. The chosen difficulty level is then displayed as 1111, 2222, 3333 or 4444, the RCX plays a little tune and the game begins. 4) Simon asks you to repeat a longer and longer color sequence (a new color is added at the end of sequence after you repeat it successfully on the keyboard). Its hand turns on the dial to show colors and plays a note (different for each color). You then have to key in the sequence in order. RCX LCD displays current sequence length (2 digits left) and high score sequence length to beat (2 digits right), separated by a dot." When you reach high score, Brick Simon plays a short tune to tell you... 5) When you finally lose, either because you hit a wrong key or waited too long (doh sound), program is halted. Press RCX Run button to start a new game!"
[1a] providing a main casing configured to conformably fit around a portion of the exterior surface of and thereby receive the housing of the controller,	main casing. *Philo* discloses a main casing conformably fits around a portion of the exterior surface of the housing of the RCX brick. See, for example, *Philo*, Brick Simon page:
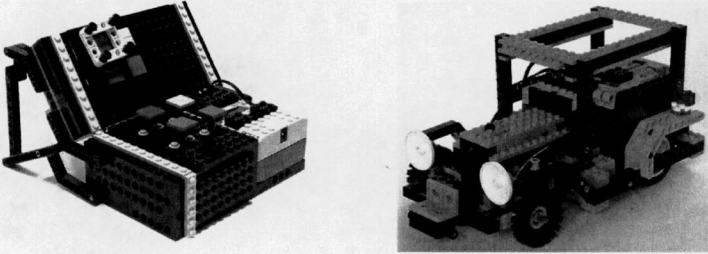
the main casing having a patterned surface portion configured to support a set of building elements that are configurable for mating to the patterned surface portion; and	See also *Philo*, Rack & Pinion Steering Car page. patterned surface portion. The main casing has Lego elements with a patterned surface portion that supports a set of building elements that mate to the patterned surface portion. See, for example, images on Brick Simon page (Simon color button elements and lid elements mount on top of casing) and Rack & Pinion Steering Car page (car roof, hood, fenders, and accessories).
[1b] providing in the set of building elements a subset of building elements that are matable to one another and configured for a user to build on the patterned surface portion of the main casing a customized replica of at least a portion	*Philo* discloses a subset of building elements that are matable to one another for a user to build on a patterned surface of the main casing a customized replica of a play item. *See*, for example, images on Brick Simon page (Simon color button elements and lid elements mount on top of casing) and Rack & Pinion Steering Car page (replica of an electronic Simon game, antique car).
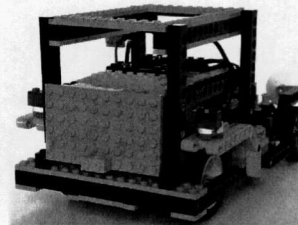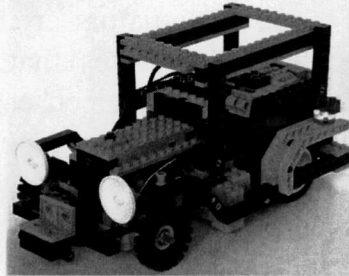
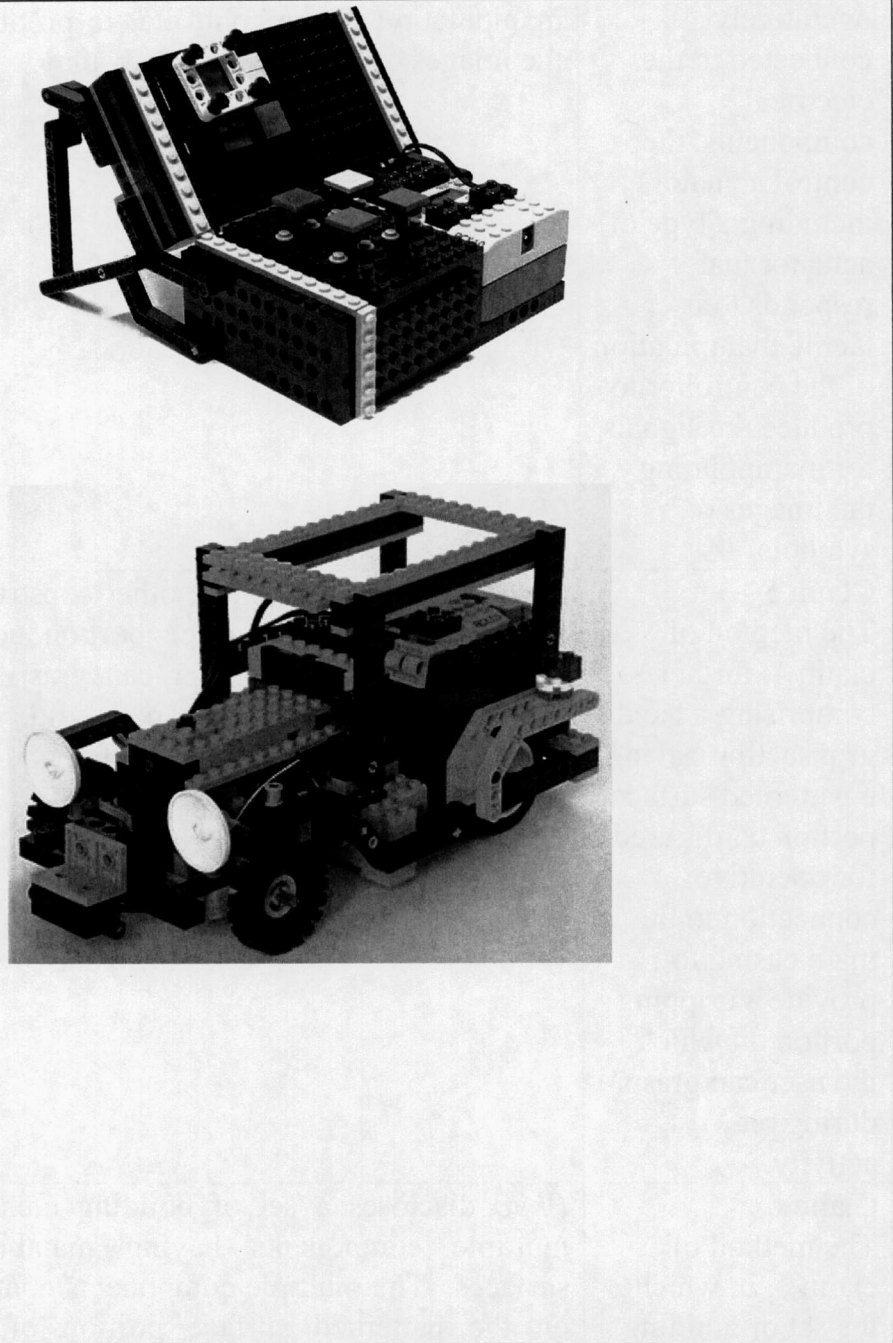|	
of a play item and thereby transform the exterior surface of the housing of the controller to a customized shape and appearance in accordance with the user's preference.	
Claim 2 The method of claim 1, further comprising control actuators operatively connected to the electrical components, the control actuators including a type of actuator that responds to user movement of the controller to produce the signals for manipulating the images or symbols.	*Philo* discloses control actuators in the form of rotation sensors. *Philo* further discloses that the rotation sensors operatively connected to the electrical components of the RCX brick. The rotation sensors respond to user movement of the controller. The output of the rotation sensors produces signals that affect the images or symbols on the display. See *Philo*, Rotation Sensors Internals page. "Lego rotation sensor is a nice little device that enables RCX to measure rotation of an axle with good resolution: 16 steps per turn….As the axle is rotated clockwise, output cycles through steps 1 > 2 > 3 > 4 > 1, and through steps 1 > 4 > 3 > 2 > 1 when rotated ccw. This enables RCX to determinate rotation direction" *Philo* also includes a link to a MindStorms RCX Sensor Input page by Michael Gasperi, The MindStorms RCX Sensor Input page, which discloses "My Almost Ultrasonic Motion Sensor detects the motion of objects near to the RCX." (Gasperi's Mindstorms RCX Sensor Input page is further discussed below under Ground 5).
Claim 3 The method of claim 2, in which the type of actuator is a motion sensor.	*Philo* discloses an actuator that is a type of motion sensor (see discussion of rotation sensor above with respect to claim 2.)
Claim 4 The method of claim 1, further comprising control actuators	*Philo* discloses "touch sensors" that are operatively connected to electrical components of the RCX brick in the Brick Simon game construction. "The two keys on the left release the pressure on two touch sensors." The touch sensors are control actuators of a type that responds to tactile

operatively connected to the electrical components, the control actuators including a type of actuator that responds to user tactile manipulation of the controller to produce the signals for manipulating the images or symbols.	manipulation of the controller to produce signals that affect the images or symbols on the display.
Claim 5 The method of claim 1, further comprising a hand grip section having a patterned surface portion configured for operative connection to the main casing to provide a gripping portion on which the user can grasp during play activity.	*Philo* discloses robots and other constructions with a section having a patterned surface portion connected to its main casing and which the user can grasp during play activity, such as, for example, the body, lid, or prop stand of the Simon game replica, or the roof frame of the rack & pinion steering car.
Claim 6 The method of claim 1, in which the set of building elements constitutes a first set of building elements, and further comprising providing a second set of building	*Philo* discloses a set of building elements in the form of multiple components having matable and non-matable surfaces. The multiple components contribute to the building on the patterned surface portion of the main casing a customized replica of a portion of the play item. See, for example, images on Brick Simon page (Simon color buttons, color faux light elements on lid) and Rack & Pinion Steering Car page (for example, leading surfaces of fenders rear-view mirror, roof supports).

elements in the form of multiple components having matable and nonmatable surfaces, the matable surfaces configured to mate with building elements in the subset and the nonmatable surfaces configured to not mate with the patterned surface portion of the main casing or the first set of building elements, the multiple components of the second set of building elements contributing to the building on the patterned surface portion of the main casing a customized replica of at least a portion of a play item configured for use in play activity.	
Claim 8 The method of claim 1, in which the set of building elements includes a building element in the form of a play	*Building Robots* discloses a building element in the form of a play item having a surface that is not matable to the patterned surface portion. See discussion relative to claim 6.

item having a surface that is not matable to the patterned surface portion.	

2. Ground 4 – Philo in combination with Building Robots renders obvious claim 7

The following shows that the features of claim 7 are obvious over *Philo* in combination with *Building Robots*, rending that claim unpatentable under 35 U.S.C. § 103(a).

As discussed above with respect to Ground 2, *Building Robots* discloses a control section of a controller (see *Building Robots*, p. 99:3-100:2). *Building Robots* also discloses a communication link between the RCX brick and a personal computer (via infrared), by which information is passed. *See Building Robots*, p. 99:1-2; 100:17-19. Although neither *Building Robots* nor *Philo* appear to expressly disclose a cellular phone operationally responsive to user-entered commands that are delivered to the control section, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide a communication link between the control section of the RCX and a cellular telephone to allow users to interact with the by a more portable device than a personal computer.

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3.   *Ground 5 – Philo in combination with Building Robots and Gasperi's Mindstorms RCX Sensor Input page renders obvious claims 2-3*

The following claim chart demonstrates that it would have been obvious to one of ordinary skill to modify *Philo* in view of the teachings of *Building Robots* and Gasperi's Mindstorms RCX Sensor Input page in order to yield the claimed subject matter, thus rendering these claims unpatentable under § 103.

All three references are concerned with creating robots and various creations from the RCX brick using Lego Mindstorms Robot Invention System. *Philo*'s home page at http://philohome.com/index.htm provided a link to the *Building Robots* book along with an image of the front cover of the book, with the caption "Truly inspiring!" Both *Philo* and *Building Robots* link or cite Gasperi's Mindstorms RCX Sensor Input page. Regarding Gasperi's page, *Building Robots* states: "Michael Gasperi's super-site about MINDSTORMS sensors – the starting point for any investigation about this component. *Building Robots*, p 552:7-10.

Claim 2	As noted in Grounds 1 and 3 above with respect to claim 2, the *Building Robots* disclose rotation and various other sensors that can be connected to the RCX brick to perform various functions.
The method of claim 1, further comprising control actuators	
operatively connected to the electrical components, the control actuators	Gasperi's Mindstorms RCX Sensor Input page discloses numerous sensors for the RCX brick, including "My Almost Ultrasonic Motion Sensor detects the motion of objects near to the RCX."
including a type of actuator that	Almost Ultrasonic Motion Sensor This sensor uses the sound generator in the RCX to make a 15kHz audio tone, which is

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responds to user movement of the controller to produce the signals for manipulating the images or symbols.	almost ultrasonic .... Motion of objects near to the RCX and microphone cause the volume level to vary as the signal path and distance between them changes. The variation in level is further amplified and fed to the RCX. The RCX sees a level of about 31 when there is no motion, and peaks to over 50 when there is rapid significant motion." https://web.archive.org/web/20041204113943/http:/www.plazaearth.com/usr/gasperi/motion.htm It would have been obvious to combine Gasperi's motion sensor with the creations of *Building Robots* and *Philo* in order to make the robots able to respond to more stimuli.
Claim 3 The method of claim 2, in which the type of actuator is a motion sensor.	See discussion of claim 2.

C.   Rejections based on the Shackelford as primary reference

1.   Ground 6 – Shackelford anticipates claims 1-4, 6, and 8

The following claim chart shows that Shackelford (Exhibit B4) teaches each and every limitation of claims 1-4, 6, and 8 of the '066 patent, rendering those claims unpatentable under 35 U.S.C. § 102(b).   Shackelford was before the Examiner during prosecution of the '066 patent, but did not form the basis of any ground of rejection and is not otherwise mentioned in the prosecution history of the '066 patent.

Claim Language	Discussion
Claim 1 [1 preamble] A	Shackelford discloses a controller 17 which can manipulate images and symbols on the display 53. The controller 17 has

method of facilitating user preference in creative design of a controller for manipulating images or symbols on a display, the controller having a housing with an exterior surface and an interior region confining electrical components for producing signals for manipulating image or symbols on the display, comprising:	electronic components inside of the controller. See Fig. 2. The controller 17 is connected to various switches 5 and buttons 52, which produce signals to the controller for display on the display 53. B4, 5: 54-58, Figures 1-2. "Preferably base 15 also defines within the depth dimension a container or housing for storage of additional components of the embodiment, miniature in size, so that those components are hidden from view. An electronic controller 17, illustrated in FIG. 2, suitably includes a programmed microprocessor or computer, as variously termed, memory and other associated elements, and the power supply and cabling, is housed inside that formed container." B4, 5: 51-58. "In the preferred embodiment, controller 17 may also display cues visually upon liquid crystal display 53 as a supplement or as an alternative to the verbal cues, or may cause the LCD to reveal (display) a "virtual" (invisible) enemy or force as impending danger to stimulate play." B4, 15: 56-61. "Alternatively, should LCD display block 53 be included in the original purchase, the controller can be programmed to provide a visual display of the time and date. In that alternative a push button switch may be depressed until the digital read-out on the display shows the correct time and date; and a like procedure is used for correctly entering information of special dates or times." B4, 18: 59-65.
[1a] providing a main casing configured to conformably fit around a portion of the exterior surface of and thereby receive the housing of the controller, the main casing	Shackelford discloses the casing for the controller 15 allows for various building elements to be placed upon it in various shapes. B4, 5: 24-67, Figures 1, 5B, 6B, and 8B. "Preferably base 15 also defines within the depth dimension a container or housing for storage of additional components of the embodiment, miniature in size, so that those components are hidden from view. An electronic controller 17, illustrated in FIG. 2, suitably includes a programmed microprocessor or computer, as variously termed, memory

having a patterned surface portion configured to support a set of building elements that are configurable for mating to the patterned surface portion; and	and other associated elements, and the power supply and cabling, is housed inside that formed container." B4, 5: 51-58. "Reference is again made to FIG. 1. To mount the play pieces to base 15, an evenly distributed plurality of short upright cylindrical studs 2, are arranged in rows and columns on the base. Those studs serve as coupling pins to frictionally engage the play piece from the underside and mount the play piece to the base at the location selected by the player. The underside of the play pieces contain frictional grips, couplings, that grips the respective studs." B4, 6: 1-8. "The grips included on the underside of a play piece are illustrated, for one, in FIG. 6B to which brief reference is made. The bottom view of play piece 11 illustrated, one of the stacked blocks in the rear of FIG. 1, includes inwardly directed spaced ribs 4 extending vertically up the side walls of the rectangular shaped play piece. The relative geometry and dimension of the thin outside edge of the ribs produces a friction fit to the cylindrical walls of studs 2 of the base, the latter of which are represented by dotted lines. Because both the ribs and the studs are constructed of plastic material, which possesses some flexibility, the bottom of the play piece slides into place over the studs and is held in place." B4, 6: 12-24.
[1b] providing in the set of building elements a subset of building elements that are matable to one another and configured for a user to build on the patterned surface portion of the main casing a customized replica of at least a portion	Shackelford discloses the casing for the controller 15 allows for various building elements to be placed upon it in various shapes, which would include a play item, as shown in the figures and columns 10-15, for example. Shackelford discloses building elements formed from a subset of building elements that are matable to one another and configured for a user to build on the patterned surface portion of the main casing a customized replica of at least a portion of a play item. B4, 6: 35-47, Figures 4A-7. "With like mechanical couplings, other play pieces that contain grips on the underside may also be attached on top of other play pieces that contain coupling studs on the upper surface. As an example, smart play piece 7, decorated as a

of a play item and thereby transform the exterior surface of the housing of the controller to a customized shape and appearance in accordance with the user's preference.	dragon character, is mounted atop a stack of blocks 9, 11, and 13; and the bottom most block 13 is mounted to the base. Those skilled in the art will recognize the general construction of the play piece to base and play piece to play piece mounting structure, which is known, is found in the plastic blocks in the Interlego (LEGO) and Duplo brand construction sets. Each of the play pieces contains like grips on the underside enabling the play piece to mount to the base (and to other blocks)." B4, 6: 35-47.
Claim 2 The method of claim 1, further comprising control actuators operatively connected to the electrical components, the control actuators including a type of actuator that responds to user movement of the controller to produce the signals for manipulating the images or symbols.	Shackelford discloses the control actuators are switches 5 and buttons 52, as well as motion detectors and light sensors which would be activated by a user to produce signals to manipulate the display 53. B4, 14: 14-30, 21: 9-18. "Thus, other smart blocks may be included with different peripheral devices. As example, another smart block may include a motion detector that senses movement or a change in light and produces a signal input to the controller. The controller responds with a response specified by the program. As example, a siren sound could be exhibited in response. Other effects may be chosen as an alternative." B4, 21: 9-18. "Infra-red transceiver block. An additional smart block 55 contains a miniature wireless transceiver, such as an infra-red or RF transceiver, including battery supplied power. The base 58 of the block is also a 2×2 sized and contains the frictional grips, as earlier described for the other blocks, for mounting the block to the base, but not visible in the figure. The block also includes the unique identification resistor and the male connector to couple the connector to a hot spot when mounted at certain locations on base 15. The wiring for such a play piece may be as illustrated at the lower right side of FIG. 11, in which resistor 60 is shown wired between contacts J1 & J2 of the respective male connector. Such a communication block may be used to transfer information electronically between the present construction set and another construction set similarly equipped with wireless communication." B4, 14: 14-30.
Claim 3	Shackelford discloses the control actuators are motion

The method of claim 2, in which the type of actuator is a motion sensor.	detectors and light sensors which would be activated by a user to produce signals to manipulate the display 53. B4, 14: 14-30, 21: 9-18. "Thus, other smart blocks may be included with different peripheral devices. As example, another smart block may include a motion detector that senses movement or a change in light and produces a signal input to the controller. The controller responds with a response specified by the program. As example, a siren sound could be exhibited in response. Other effects may be chosen as an alternative." B4, 21: 9-18.
Claim 4 The method of claim 1, further comprising control actuators operatively connected to the electrical components, the control actuators including a type of actuator that responds to user tactile manipulation of the controller to produce the signals for manipulating the images or symbols.	Shackelford discloses the control actuators are switches 5 and buttons 52, which would be activated by a user to produce signals to manipulate the display 53. B4, 5: 35-50. "Play pieces 5 and 52 contain electrical switches that the player may operate to produce player inputs, essentially forming switch blocks. Play pieces 3, 53, 54 and 55 contain peripheral devices that are electrically actuated. The peripheral device in block 3 is a lamp; that in block 54 is a motor driven propeller; that in block 53 an LCD display; and that in block 55 an infra-red (IR) transmitter. Play pieces 1 and 7 are fantasy figures, respectively "troll" and "dragon" characters. Because each of the foregoing play pieces contains a computer readable identification, later herein described in greater detail, those blocks are sometimes referred to herein as "smart" blocks. Play pieces or play pieces 9, 11, and 13, however, do not contain such identification and, hence, are not included herein in the "smart" category. Though appearing as ordinary blocks, they include electrical conductors as later herein described." B4, 5: 35-50. "Momentary Switch block. Another block or control input block for providing player inputs to the controller is smart block 52, which contains a momentary operate switch. The block is of a 1×1 size and contains the frictional coupler on the underside to permit mounting to the studs on the set base 15. This block too is a smart block. As in the other smart blocks a four-prong male connector is located on the

	underside of the block for coupling to a mating connector in the hot spot of base 15. And the block houses inside a unique resistor 61 that is wired between the J1 and J2 of the respective male electrical connector on the underside of the block, not visible in the figure but schematically illustrated in FIG. 10F." B4, 13: 31-43.
Claim 6 The method of claim 1, in which the set of building elements constitutes a first set of building elements, and further comprising providing a second set of building elements in the form of multiple components having matable and nonmatable surfaces, the matable surfaces configured to mate with building elements in the subset and the nonmatable surfaces configured to not mate with the patterned surface portion of the main casing or the first set of building elements, the multiple components of the second set of building elements	Shackelford discloses there are numerous building elements in the form of play items that have a surface that will not mate with 15. B4, Figures 1 and 4-8. Shackelford discloses building elements formed from a subset of building elements that are matable to one another and configured for a user to build on the patterned surface portion of the main casing a customized replica of at least a portion of a play item. B4, 6: 35-47, Figures 4A-7. "With like mechanical couplings, other play pieces that contain grips on the underside may also be attached on top of other play pieces that contain coupling studs on the upper surface. As an example, smart play piece 7, decorated as a dragon character, is mounted atop a stack of blocks 9, 11, and 13; and the bottom most block 13 is mounted to the base. Those skilled in the art will recognize the general construction of the play piece to base and play piece to play piece mounting structure, which is known, is found in the plastic blocks in the Interlego (LEGO) and Duplo brand construction sets. Each of the play pieces contains like grips on the underside enabling the play piece to mount to the base (and to other blocks)." B4, 6: 35-47.

contributing to the building on the patterned surface portion of the main casing a customized replica of at least a portion of a play item configured for use in play activity.	
Claim 8 The method of claim 1, in which the set of building elements includes a building element in the form of a play item having a surface that is not matable to the patterned surface portion.	Shackelford discloses there are numerous building elements in the form of play items that have a surface that will not mate with 15. B4, Figures 1 and 4-8. "A set of sense inputs, A1:A3 and the like that are connected to various hot spots on the base 15, are individually connected via cable 25 to the inputs of controller 17. A like number of control outputs of the controller are connected via cable 27 to the control leads A1:A3 of the base. A more explicit illustration of the latter is presented in FIG. 13, later herein discussed. The controller performs certain sense and/or control operations through the foregoing sense and control inputs and outputs. Separately from the sense inputs, wireless transceiver 55, one of the smart blocks, is connected to the controller through one of the communication ports 47, preferably a serial port. The inputs for driving LCD display 53, another smart block, is supplied through a display output of the controller via cable 59." B4, 7: 61 – 8: 7.

D.   Rejections based on Anderson as primary reference

1.   Ground 7 – Anderson anticipates claims 1-4, 6, and 8

The following claim chart shows that Anderson (Exhibit B5) teaches each

and every limitation of claims 1-4, 6, and 8 of the '066 patent, rendering those

claims unpatentable under 35 U.S.C. § 102(b).   Anderson was not before the

Examiner during prosecution of the '066 patent and, as such, did not form the basis

of any ground of rejection, and is not otherwise mentioned in the prosecution

history of the '066 patent.

Claim Language	Discussion
Claim 1 [1 preamble] A method of facilitating user preference in creative design of a controller for manipulating images or symbols on a display, the controller having a housing with an exterior surface and an interior region confining electrical components for producing signals for manipulating image or symbols on the display, comprising:	Anderson discloses a method of facilitating user preference in creative design of a controller for manipulating images or symbols on a display. Anderson discloses a controller 106, which has an interior region and an exterior surface shown in Figs. 1 and 2. The controller is used to manipulate the images on the display 112. See B5, Figs. 1 and 2 and accompanying description.
[1a] providing a main casing configured to conformably fit around a portion of the exterior surface of and thereby receive the housing of the controller, the main casing having a patterned	Anderson discloses a main casing 102 that fits around controller 106 (as shown in Figs. 1 and 2). The main casing 102 has a patterned surface which supports building elements 102, which is shown in Figs. 1 and 2. B5, Figures 1 and 2.

surface portion configured to support a set of building elements that are configurable for mating to the patterned surface portion; and	
[1b] providing in the set of building elements a subset of building elements that are matable to one another and configured for a user to build on the patterned surface portion of the main casing a customized replica of at least a portion of a play item and thereby transform the exterior surface of the housing of the controller to a customized shape and appearance in accordance with the user's preference.	Anderson discloses a subset of building elements that are matable to one another for a user to build on a patterned surface of the main casing a customized replica of a play item. As shown in Figs. 1 and 2, the building elements can build on one another to form various structures. Anderson describes various play items that can be created For example, B5, Paragraphs 0027, 0045, 0047.
Claim 2 The method of claim 1, further comprising control actuators operatively connected to the	Anderson describes various sensors that can sense movement. See B5, Paragraphs 0033-36. Paragraph 0035. "In FIG. 3, an example of the movement of a rendered virtual model in response to a corresponding movement of a physical model is shown. One or more of construction elements 102 may include a sensor 118 capable of detecting movement of the construction element 102 or of the

electrical components, the control actuators including a type of actuator that responds to user movement of the controller to produce the signals for manipulating the images or symbols.	assembled physical model 104. Sensor 118 is periodically interrogated by controller 106, and information describing the movement of the construction element 102 obtained, in this case, indicating translation of the construction element 102 from a first position 120 to a second position 122. The controller 106 communicates this information to the information handling system 108, whereupon virtual model 112 is translated from a first position 124 corresponding to the first position 120 of physical model 120 to a second position 126 corresponding to the second position of physical model 104. Movement of the virtual model 112 may be scaled compared to movement of the physical model 104 if desired by the user, or if deemed necessary for display of virtual model 112 by display 114."
Claim 3 The method of claim 2, in which the type of actuator is a motion sensor.	Anderson discloses an actuator that is a type of motion sensor. See B5, Paragraphs 0033-36. Also Paragraph 47: "In embodiments of the invention, virtual models may be rendered of physical models as they are taken apart or destroyed. For example, in one embodiment, physical models may be created for modeling failure mechanisms of the objects they represent (e.g., bridges, buildings, aircraft components, automobiles, etc.). Sensors within the construction elements used in building the physical model may detect physical conditions (e.g., forces, movements, temperatures, etc.) within the physical model during failure. In one specific embodiment, physical models of automobiles used as children's toys may be crashed together, or into stationary objects, causing parts such as, doors, hoods, bumpers, wheels, etc., implemented as construction elements in accordance with the present invention, to be thrown off. Preferably, the construction element parts forming the automobiles may be equipped with sensors for detecting physical conditions of the parts such as velocity, acceleration, position, orientation, and the like. In this manner, the motion of the various construction element parts may be recorded for generating an animated virtual model of the crash, for example, for representing a car accident or "demolition derby" in a computer animation or the like, which may include effects, such as explosions, sound, and

	the like."
Claim 4 The method of claim 1, further comprising control actuators operatively connected to the electrical components, the control actuators including a type of actuator that responds to user tactile manipulation of the controller to produce the signals for manipulating the images or symbols.	Anderson describes numerous types of blocks and elements that can be used with the system. B5, Para. 0045. The system described in Anderson allows the user to manipulate the blocks or elements to change the images on the display. B5, Paras. 0035-36; Fig. 5.
Claim 6 The method of claim 1, in which the set of building elements constitutes a first set of building elements, and further comprising providing a second set of building elements in the form of multiple components having matable and nonmatable surfaces, the matable surfaces configured to mate	Anderson describes using numerous types of building elements, which include ones with matable and nonmatable surfaces. B5, Para. 0045. These building elements can attach to the main casing or other building elements as shown in Figs. 1-3. Anderson teaches to use these building elements to create numerous play items for use in play activities. B5, Para. 0027 and 0047.

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with building elements in the subset and the nonmatable surfaces configured to not mate with the patterned surface portion of the main casing or the first set of building elements, the multiple components of the second set of building elements contributing to the building on the patterned surface portion of the main casing a customized replica of at least a portion of a play item configured for use in play activity.	(
Claim 8 The method of claim 1, in which the set of building elements includes a building element in the form of a play item having a surface that is not matable to the patterned surface portion.	*Building Robots* discloses a building element in the form of a play item having a surface that is not matable to the patterned surface portion. See discussion relative to claim 6.

2. Ground 8 – Anderson in combination with Xbox Forums renders obvious claim 8

To the extent Anderson does not disclose all of the features of claim 8, it would have been obvious in view of the *Xbox Forums* webpage (Exhibit B6). *Xbox Forums* was not before the Examiner during prosecution of the '066 patent and, as such, did not form the basis of any ground of rejection, and is not otherwise mentioned in the prosecution history of the '066 patent. Xbox Forums and Anderson both relate to creating constructions of Lego's around controllers. For example, *Xbox Forums* discloses: "I am thinking of making a lego case for my xbox. I am fully aware that this has been done before..." *Xbox Forums* discloses: "you've got to make it so that you can stick lego dudes above or on each controller port to represent who's plugged in!". B6, p. 2. "I like the idea of lego-guy heads above the controller ports to represent who is playing". B6, p. 5. It would have been obvious to include building elements in the form of a play item having a surface that is not matable to the patterned surface portion in order to have more realistic and interesting model.

VII. Conclusion

Petitioner has shown that *Building Robots, Philo,* Shackelford, and Anderson disclose all of the limitations of the particular claims addressed above,

both individually and in combination. Accordingly, Petitioner submits that these references are important in determining the patentability of the claims at issue, and that this importance escaped consideration because the references were not before the Examiner.

Petitioner submits that by virtue of the claim charts presented above, Petitioner has demonstrated a reasonable likelihood of success as to Petitioner's contention that at least one claim of the '066 patent is unpatentable. Accordingly, Petitioner respectfully requests institution of *inter partes* review of the '066 patent on the basis of each of the grounds of rejection presented here.

Respectfully submitted,

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Date: June 10, 2016   /Chris D. Thompson/

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CERTIFICATE OF SERVICE

Pursuant to 37 CFR §§ 42.6(e)(4)(i) *et seq.* and 42.105(b), the undersigned

certifies that on June 10, 2016, a complete and entire copy of this Petition for *Inter*

Partes Review, and all supporting exhibits, were provided via Federal Express,

First Overnight, costs prepaid, to the Patent Owner by serving the correspondence

address of record as follows:

<div align="center">

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