

Declaration of Joel Delman 37 C.F.R. § 1.68 in Support of
Petition for *Inter Partes* Review of U.S. Patent No. 8,371,282

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Prime Time Toys LLC, Prime Time Toys Ltd.
and Easebon Services Ltd.
Petitioners

v.

Spin Master, Inc.
Patent Owner

U.S. PATENT NO. 8,371,282

Case IPR2023-TBD

**DECLARATION OF JOEL DELMAN UNDER 37 C.F.R. § 1.68 IN
SUPPORT OF PETITION FOR *INTER PARTES* REVIEW OF
U.S. PATENT NO. 8,371,282**

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I, Joel Delman, do hereby declare as follows:

I. Introduction

1. I am the founder and Chief Design Officer at Informed Innovation. My business address is 2176 W 24th Street, Los Angeles CA 90018, and I have been involved in the industrial design field for 28 years. I am over 18 years of age and I would otherwise be competent to testify as to the matters set forth herein if I am called upon to do so at trial, hearing or deposition.

2. I have been retained as an expert witness on behalf of Prime Time Toys LLC, Prime Time Toys Ltd., Easebon Services Ltd. for the above-captioned Petition for Inter Partes Review (“IPR”) of U.S. Patent No. 8,371,282 (the “’282 Patent”).

3. I have been asked to provide my opinions regarding whether Claims 1-15, 17, and 19-21 of the ’282 Patent (“the Challenged Claims”) are invalid as anticipated or would have been obvious to a person having ordinary skill in the art at the time of the alleged invention.

4. The ’282 Patent issued on February 12, 2013, from U.S. Patent Appl. No. 12/777,134 (“the ’134 application”), filed on May 10, 2010. Ex. 1001 at Cover.

5. For the purposes of my Declaration, I have used the alleged invention dates claimed by Patent Owner in the related ITC Case, specifically, February 21, 2010 as the date of the alleged invention for claims 1-4 and the filing date of May 10, 2010 for claims 5-15, 17, and 19-21. Whether the date of alleged invention is

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February 21, 2010 or May 10, 2010 has no impact on the opinions I offer in this Declaration.

6. The face of the '282 Patent names Keith G. Meggs, Ronald Brawer, Michael G. Hoeting, and Neil Hamilton as the purported inventors, and identifies The Maya Group as the purported assignee. Ex. 1001 ('282 Patent) at Cover. I understand that Spin Master, Inc. alleges it currently owns the '282 Patent and Hasbro, Inc. alleges it has an exclusive license to the '282 Patent.

7. In preparing this Declaration, I have reviewed the '282 Patent, the file history of the '282 Patent, prior art references, and other references from the time of the alleged invention.

8. In forming the opinions expressed in this Declaration, I relied upon my education, training, knowledge, and experience in the relevant art, and have considered the viewpoint of a person having ordinary skill in the relevant art as of February 10, 2010 (a "POSITA," defined below in Section VII). I have further considered and relied upon the materials cited in this Declaration, as well as a conversation with Dr. Maureen Reitman. My opinions are based, at least in part, on the following references, as well as the art and publications cited throughout this declaration: (1) Bulgarian Patent No. BG110343 to Peev ("Peev") (Ex. 1003) published July 31, 2009 and (2) ThinkGeek Spitballs ("Spitballs") (Ex. 1002) published November 27, 2009.

II. Background and Qualifications

9. I earned a Master of Industrial Design from Pratt Institute in New York, and have been an industrial designer, design strategist, and inventor for the past 28 years. I most recently worked with the design consultancy Product Development Technologies LLC (PDT) since 1999 and served as PDT's Los Angeles Creative Director from 2007.

10. Since PDT's acquisition in December 2017, I have continued my design practice through my consultancy Informed Innovation Inc. My work encompasses a broad range of activities related to product design and development, including strategic user research (to guide clients toward optimal design solutions), aesthetic and functional innovation, and high-level program management. I also provide expert witness and litigation support services in matters related to patent litigation.

11. Prior to joining PDT, I worked as a staff designer at the New York based design consultancies Henry Dreyfuss Associates and Cousins Design, then upon moving to Chicago as Senior Designer with Zenith Electronics Corp. I currently serve as Chair of the Industrial Designer's Society of America's (IDSA) Design Protection Committee, and as an Associate Professor at ArtCenter College of Design in Pasadena, California.

12. My CV is attached to this report as Exhibit A.

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13. Throughout my career in industrial design and product development, I have been engaged to assist clients with a wide variety of design challenges, including numerous programs focused on the development of toys and games. My clients and royalty-based entrepreneurial work for such designs have included Fisher Price, Learning Resources, Little Kids, Vtech, Crayola and others, for whom I designed everything from infant products to action figures and electronic learning games.

14. Among my many projects for this market, I invented and designed “Light ‘N Strike Math” for Learning Resources, an award-winning electronic activity game which has remained among the most successful products in its category for the past 15 years. I also invented and licensed the “Bubble Bugs” line of bubble blowing toys for Little Kids Inc., incorporating air- powered bubble blowing mechanisms that have successfully sold at big box retailers and independent toy shops without interruption for the past 24 years.

15. My work in the toy industry has been recognized with Gold Awards from Doctor Toy and the Toy Industry Association.

16. I have more than a year of experience developing projectile launchers, including conceiving, designing, and prototyping toy projectile launchers. For example, I conceived, designed and prototyped projectile toys including “Team Stomp Rockets” (in which two or more children simultaneously provide the air

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pressure to launch foam rocket projectiles) and gun-like launchers for toy cars and “Ice Riders.”

17. I have likewise assisted in the design and development of an advanced, spring-loaded diabetes lancing device incorporating a launch mechanism with many similarities to mechanisms powering spring-powered projectile toy guns (and for which Nerf gun mechanisms were modified to serve as initial prototyping test beds).

18. For that project (and all design programs on which I have been engaged) I gained a comprehensive understanding of the intended users for each product I design, how they will use the product, and how my designs will be compared to other designs that consumers evaluate in their purchasing decisions.

19. On a personal level, I am the father of two boys with whom I have extensive hands- on experience in the purchase, use and maintenance of our family’s large collection of airguns. We own approximately 30 airguns, vintage and contemporary, comprising most every mechanism available – multi-pump, spring piston, gas piston, electric, CO2 and PCP – which I regularly maintain and occasionally repair. These guns utilize BBs, pellets and airsoft ammunition.

20. I have also purchased, broken down, and modified toy projectile launchers, including for example Nerf blasters, of all kinds. I have engaged with the active online community of Nerf “modders” to employ more powerful springs and

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other aftermarket components to modify and improve the firing qualities – power and accuracy – of the toy guns I purchased for my sons.

21. Through my professional and personal experience described above, I thus bring to this engagement the understanding and perspective of a designer and inventor, as well as a parent, who is intimately familiar with the category of toys which form the subject matter of this litigation, including how they operate and how they are played with by children. I am very familiar with the design and development of projectile launchers such as those at issue in this matter, and possess a solid understanding of the mechanisms and play patterns relevant to the development of projectile launching devices.

22. I have been named as inventor on over 40 issued and applied for U.S. Patents. The complete list of these patents and published applications is attached as Exhibit B. My design work has received awards and recognition from the Industrial Designers Society of America (which awards include, among others, the “IDSA 20/20 Award” recognizing twenty designers who contributed to the advancement of the design profession in 2020), the Chicago Athenaeum, the Consumer Electronics Association, the Toy Industry Association, ID Magazine and the Wall Street Journal, and has been featured in books aimed at educating design students about the profession.

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23. In addition to my work in product design consulting, I have frequently offered my expertise as mentor and advisor to technology and hardware-focused startups via Los Angeles based incubator and accelerator programs, and served as a member of the Board of Directors for the 3D printed medical device manufacturer MetaMason Inc. for five years.

24. Given the foregoing range of professional and personal experience over the course of my career as an industrial designer, I believe I am well qualified to opine on the matters covered in this report, and to offer opinions from the viewpoint of one skilled in the art with respect to the alleged inventions at issue in this case.

25. During the previous five years, I have testified as an expert either at trial or by deposition in 15 cases. The complete list of these matters is attached as Exhibit C.

26. During the previous 10 years, I have authored approximately 25 articles and publications. Attached as Exhibit D is the list of articles and publications I have written.

27. Prior to entering the profession of industrial design, I graduated Harvard Law School and practiced corporate and securities law. I have not practiced or been barred as an attorney for the last 27 years.

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28. I have been informed by counsel for Petitioners about the relevant provisions of patent law to be applied for purposes of this report, which are summarized in Section V below. I have applied those principles to the facts of this case. I offer no opinions on the law related to the matters in this case.

29. I do not provide any guidance or opinion as to the law, which I understand is the purview of the court. Rather, the opinions expressed and reasoning applied are those of an experienced industrial design consultant, viewing the relevant questions from the relevant perspectives (e.g., a person having ordinary skill in the art at the time of the alleged invention, i.e., in the February-May 2010 timeframe) and applying (as necessary) the law as it has been explained to me by counsel for Petitioner.

III. Compensation

30. I am being compensated for work on this matter pursuant to my agreement with Rubin Anders at my normal rate of \$350 per hour. For non-working travel time I am being compensated pursuant to my agreement with Rubin Anders at my normal rate of \$200 per hour. My compensation is in no way based on the outcome of this investigation or on the opinions that I provide. I have no interest, financial or otherwise, in the outcome of this matter. I have no financial interest in, or affiliation with, any of the parties in this matter.

IV. Summary of Opinions

31. In my opinion, Claims 1 and 4 of the '282 Patent are anticipated by Spitballs.

32. In my opinion, Claims 1-15, 17, and 19-21 of the '282 Patent are rendered obvious by the combination of Peev and Spitballs.

V. Legal Principles

33. I am not an expert in patent law and am not offering any opinions on the legal standards. In this section I provide my understanding of the law as it has been explained to me by counsel for Petitioners, and I applied this understanding when rendering my opinions in this Declaration.

34. I understand that claims in an IPR are construed using the same claim construction standard that would be used to construe the claim in a civil action, including construing the claim in accordance with the ordinary and customary meaning of such claim as understood by one of ordinary skill in the art and the prosecution history pertaining to the patent. I also understand that the ALJ in the related ITC case has construed certain claim terms and I have used her constructions.

35. I understand that a claim is invalid if it is anticipated or obvious. Anticipation of a claim requires that every element of a claim be disclosed expressly or inherently in a single prior art reference, arranged in the prior art reference as arranged in the claim. I understand that a limitation is inherently disclosed if it is

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necessarily present. I understand that if any claim limitation is not disclosed by the single prior art reference, then that prior art reference does not anticipate the claim.

36. Obviousness of a claim requires that the claim be obvious from the perspective of a person having ordinary skill in the relevant art at the time the alleged invention was made. I understand that a claim may be obvious in view of a single prior art reference, or may be obvious based on a combination of two or more prior art references.

37. I understand that an obviousness analysis requires an understanding and consideration of the scope and content of the prior art, any differences between the alleged invention and the prior art, the level of ordinary skill in evaluating the pertinent art, and any secondary considerations of nonobviousness (if any).

38. I understand that when there is a design need or market pressure to solve a problem and there are a finite number of identified, predictable solutions, a person of ordinary skill has good reason to pursue the known options within his or her technical grasp. If this leads to the anticipated success, it is likely the product not of innovation but of ordinary skill and common sense.

39. I further understand that a claim is obvious if it unites old elements with no change to their respective functions or alters prior art by mere substitution of one element for another known in the field, and that combination yields predictable results. While it may be helpful to identify a reason for this combination, common

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sense should guide the analysis and no rigid requirement of finding a teaching, suggestion, or motivation to combine is required. When a product is available, design incentives and other market forces can prompt variations of it, either in the same field or a different one. If a person having ordinary skill in the relevant art can implement a predictable variation, obviousness likely bars its patentability.

40. I also understand that for the same reason, if a technique has been used to improve one device and a person having ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious. I understand that a claim may be obvious if common sense directs one to combine multiple prior art references or add missing features to reproduce the alleged invention recited in the claims.

41. With respect to secondary considerations, I understand that certain factors may support or rebut the obviousness of a claim, and these are often referred to as “secondary considerations.” I understand that such factors include, among other things, (i) commercial success of the alleged invention, (ii) skepticism of those having ordinary skill in the art at the time of the alleged invention, (iii) unexpected results achieved by the alleged invention, (iv) any long-felt but unsolved need in the art that was satisfied by the alleged invention, (v) the failure of others to make the alleged invention, (vi) praise of the alleged invention by others having ordinary skill in the art, and (vii) copying of the alleged invention by others in the field. I also

understand that contemporaneous and independent invention by others is a secondary consideration tending to show obviousness.

42. I understand that there must be a nexus—that is, a connection between the merits of the claimed invention and any submitted secondary considerations evidence—in order for the evidence to be pertinent to the obviousness inquiry. I understand that if there is not a nexus between the secondary considerations evidence and the claimed invention, that is not indicative of nonobviousness.

43. I understand that even if there is secondary considerations evidence that has a nexus to the Challenged Claims, that does not mean that the patent claims must be nonobvious. Rather, it is one element that must be considered in the overall obviousness analysis. I understand that weak secondary considerations evidence may not overcome a strong showing of obviousness in view of the prior art.

VI. The '282 Patent

44. The '282 Patent relates to “soft-projectile launching devices” for “super absorbent polymer projectiles.” Ex.1001, 1:5-9. The '282 Patent recognizes projectile launching devices were well-known and included “a variety of different types of launching toys,” including Nerf “blasters.” Id., 1:13-23. The '282 Patent also recognizes other toy projectile launchers, like paint ball and airsoft guns, were well-known “small projectile systems for gaming and professional training purposes.” Id., 1:56-60.

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45. The '282 Patent is not directed to any particular type of launcher. It discloses “launching devices, such as toys, amateur guns and weaponry,” and states “projection device 10 can be a bow, crossbow, sling shot, hand gun, machine gun, futuristic weapon, catapult, or shaped as any other type of weaponry,” and the “firing mechanism may be based on any of the known ways of firing or launching projectiles or ammunition from a projection device.” *Id.*, 3:45-47, 4:66-5:3, 5:12-15. In the ITC Case, named inventor Mr. Ronald Brawer of the '282 Patent testified that the first projectile launcher he used was a straw (i.e., a blow gun) Ex. 1013, 172:9-173:6 (“Q. The first projectile launcher that you utilized was a straw that blew the SAP out of the straw; right? A. Yeah.” Ex. 1013, 167:18-168:5, 174:13-176:17.

46. The '282 Patent indicates “[s]uper absorbent polymers (SAPs) were first invented “in the 1960s and are commonly used in personal disposable hygiene products such as diapers, protective underwear, and sanitary napkins” and “are polymers that can absorb an extremely large amount of liquid relative to their own mass.” *Id.*, 1:37-44.

47. During prosecution, no Office Actions issued addressing prior art. After a restriction requirement, Applicant elected the claims “drawn to ammunition” (Ex.1018, 88, 94), and the claims issued following Examiner’s amendment to the preamble of claim 1 to clarify the “projectile launcher” (which was not elected) is not part of the claim. *Id.*, 174.

48. Prior art references cited by the Patent Examiner in charge of the '282 Patent pertained to launching SAPs for use in firefighting. For example, the examiner cited U.S. Patent No. 8,386,293 to Bartlett (Ex. 1018, 175), which discloses a “method for delivering a concentrated fire retardant solution to either protect the surface from fire, or extinguish the fire when it has begun. The system finds its maximum utility with superabsorbent polymers (hereinafter SAP) such as are used to absorb moisture in diapers.” Ex. 1014.

VII. Person of Ordinary Skill in the Art (POSITA)

49. I have been advised by counsel that there are multiple factors relevant to determining the level of ordinary skill in the pertinent art, including (1) the educational level of the inventor; (2) the type of problems encountered in the art; (3) the prior art solutions to those problems; (4) the rapidity with which innovations are made; (5) the sophistication of the technology; and (6) the educational level of active workers in the field.

50. In a related proceeding before the International Trade Commission (ITC), Petitioner and I proposed that a person of ordinary skill in the art at the time of the alleged invention of the '282 Patent (“POSITA”) would be someone who (i) had a Bachelor’s degree in Industrial Design or Mechanical Engineering or (ii) a toy designer with at least five years’ experience designing toys (including launchers),

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with both of (i) and (ii) having access to a chemist knowledgeable regarding super absorbent polymers.

51. I understand that Patent Owner proposed, in the same related proceeding before the International Trade Commission (ITC), that a person of ordinary skill in the art at the time of the alleged invention (“POSITA”) of the ’282 Patent would (1) have had a Bachelor’s degree in mechanical engineering, industrial design, or an equivalent, with at least one year of relevant experience designing projectile launching systems and (2) be a member of a team, which would include a person with a Bachelor’s in materials science, chemistry, or equivalent, or has at least one year experience working with materials for use in consumer products.

52. Patent Owner’s and Petitioner’s definitions of the POSITA are similar, and my opinions in this Declaration would not change if I used Patent Owner’s definition of the POSITA rather than Petitioner’s definition.

VIII. Scope and Content of the Prior Art

A. Peev

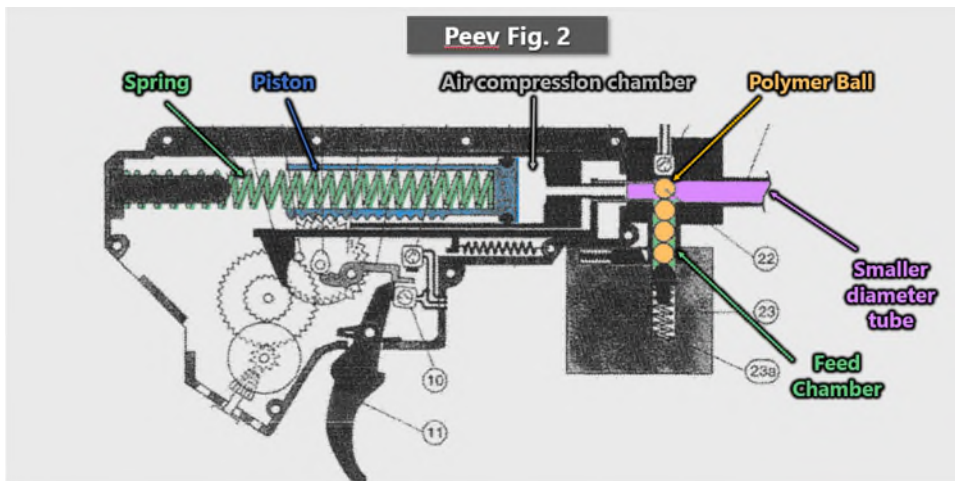
53. Peev discloses electric airsoft guns that “find application in the sporting gun industry and are used for military emulations or training *or for fun [and entertainment] when conducting airsoft games.*” Ex. 1003, 23. As explained by Peev, one advantage of its airsoft gun is that it improves airsoft game *play* by using

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techniques that “increase[] the number of shots that can be **played** on one full battery charge.” Ex. 1003, 27.

54. Figures 1-3 of Peev respectively show the airsoft gun in the different stages of firing the ammunition. Ex. 1003, 38-40. Figure 1 shows the “SAFE” mode, when the gun cannot be fired. *Id.* Figure 2 shows the trigger pulled and the ammunition 22 ready to be fired. *Id.* Figure 3 shows the ammunition launched into free flight the gun. *Id.*

55. Reference is made to Figure 2 of Peev (annotated below) to illustrate the components and operation of the airsoft gun:



Ex. 1003, 39 (annotations added).

56. Peev’s ammunition is a plurality of polymer balls 22 (see yellow shading) that are configured to be used as projectiles that are launched from an airsoft gun. Ex. 1003, 31-32. As shown in the above drawing, each polymer ball 22 has the same shape, i.e., a substantially spherical “ball”. Ex. 1003, 23.

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57. As shown above, Peev's airsoft gun is a projectile launcher that includes: (1) an air compression chamber (see the gray arrow); (2) a piston (shaded in blue) disposed within and axially aligned with the air compression chamber; and (3) a spring (shaded in green) operatively arranged to bias the piston toward a rest position (Figures 1 and 3) from a cocked position (Figure 2) within the air compression chamber. Ex. 1003, 31-32 (“...the sector wheel 5 pulls back the **piston 47**, tightens **the spring 46**, pulls back the nozzle 45 . . . and allows the ball 22 . . . to enter the chamber 20 of the **barrel 21** (Fig. 2). . . . [T]he piston 47 . . . under the pressure of the spring 46 accelerates forward and **compresses the air in the cylinder 48** inserting it through the nozzle into the barrel 21 and **firing the ball 22**.”).

58. The airsoft gun also includes a smaller diameter tube (shaded in purple) that is in communication with the air compression chamber. *Id.* A biasing force of the spring is sufficient to cause the piston to move from the cocked position (Figure 2) to the rest position (Figure 3) to force air from the air compression chamber into the smaller diameter tube and cause a soft projectile located at the firing position to accelerate and be launched into free flight from the projectile launcher. *Id.*

59. These firing mechanisms directly apply a force (i.e., air) to the ammunition. Ex. 1003, 32. As a result, in Figure 3, a polymer ball 22 has been launched from the airsoft gun into free flight. *Id.*

60. Peev teaches that a plurality of the polymer ball projectiles 22 are disposed within a feed chamber (see green shading). Ex. 1003, 31, 32 and 39. Peev's airsoft gun is adapted to load the plurality of polymer ball projectiles 22 from the feed chamber to a firing position within the projectile launcher. *Id.* Indeed, the topmost ball 22 is in the smaller diameter tube (shaded in purple), ready to be fired. *Id.*

B. Spitballs

61. Spitballs describes "Spitballs" as a toy projectile that can be launched using a launcher and that was listed for sale and described by toy retailer ThinkGeek by at least November 27, 2009. Ex. 1002. I reviewed printouts of the product packaging and description from the Wayback Machine, dated November 27, 2009 and November 30, 2009. Ex. 1002, 14-22. I understand that the Wayback Machine archives webpages as they existed on a given date, and includes within the URL the exact year/month/day/hour/minute/second on which the webpage was archived, such that the webpages in Ex. 1002 are saved versions of the webpages as they existed at the identified date and time. Ex. 1002, 1.

62. In my opinion, prior to February 21, 2010, POSITAs interested and ordinarily skilled in the art of projectile launchers, exercising reasonable diligence, could have located the Spitballs publication. Before 2010, ThinkGeek was a well-

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known toy retailer, in particular with respect to airsoft and nerf-type foam rocket launchers.

63. I understand that in October of 2009, Thinkgeek.com featured a separate category for “Cube Warfare” (cube being short for cubicle) that included 20 items, including an airsoft gun, a foam rocket launcher, a rubberband-powered launcher, a catapult, an indoor paintball simulator, an air-powered marshmallow shooter, and other launchers. Ex.1002, 26-28. A POSITA visiting the Thinkgeek website would have understood the website category “Cube Warfare” as containing warfare themed toys that could be used in an office environment.

64. Once at Thinkgeek.com, a POSITA could have navigated to “geek toys” and from there to either “Cube Warfare” or “Science Toys” to find the Spitballs listing. Ex.1002, 4-25. The page contained an image of the Spitballs packaging image and text which is available by clicking an image box. Ex.1002, 20-22. A POSITA would recognize the box contains an image that is part of the Spitballs listing by virtue of the “Zoom” icon beneath the image and the image icon in the upper left corner, and “Additional Images.” Ex.1002, 17-19. Both captures are from November 30, 2009, showing these materials were published together. Ex.1002, 17-22.

65. Spitballs are soft spherical SAP projectiles that can be launched out of projectile launchers. The picture of the Spitballs product packaging shows both un-

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hydrated balls (in plastic bag, lower middle) and hydrated balls (picture on packaging, bottom left, and in front of the packaging, bottom right) (Ex. 1002, 18):



66. The packaging shows a projectile launcher in the form of a cylindrical tube, shown on the packaging in a background cartoon with a child launching a Spitball. Ex. 1002, 18. The child's blue eyes are at the top with her or his nose

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between them and a hand in front of their nose. The hand is holding a white Spitball projectile launching tube to the child's mouth. And shown immediately behind the plastic containing the Spitballs, the tube launches a cartoon spit ball. *Id.* The Spitballs product packaging also says that the balls "grow[] 200x their size," that they "slip, slide, bounce, and explode," and that they are "fun to throw."

67. The description of Spitballs explains that "Spitballs start out as tiny balls and expand 200 times when stuck in water." Ex. 1002, 21. After hydration, "[t]hey are slimy and squishy." *Id.* Spitballs "[w]ill bounce and/or explode into mushy parts on impact (depending on the force you throw them)" and that the balls are "spherical polymers." *Id.* "Spitballs grow to about 0.6" in diameter (the longer they absorb water, the bigger they grow)." *Id.*

The description of Spitballs also shows multiple Spitballs in a person's hand and a bowl of spit balls, Ex. 1002, 21 as reproduced below:



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68. As shown above, the Spitballs packaging included a plastic packet that contains over 150 dehydrated SAPs. See Ex. 1002, 18, 21 (packet is located directly above “They Slip, Slide, Bounce & Explode”); The Spitballs packaging teaches to hydrate the dehydrated Spit Balls by emptying them into a bowl or cup of water. See Ex. 1002, 21. The product listing teaches that the dehydrated Spitballs can “grow up to 200 times their original size” as they absorb water. Ex. 1002, 21.

69. The packaging teaches to launch the hydrated SAP Spitballs through a tube, just as is done with conventional wadded up paper spitballs. As shown by the yellow highlighting below, the front of the packaging includes a drawing of a person holding a straw and launching a hydrated SAP Spitball from a tube.



Ex.1002, 18 (annotated and cropped).

IX. Claims 1 and 4 Are Anticipated By Spitballs

A. Claim 1

70. Claim 1 recites “Ammunition configured for use with a projectile launcher...” Spitballs’ packaging depicts a person launching a projectile (“Spitball”) using a tube-shaped projectile launcher. Thus, Spitballs are ammunition configured for use with a projectile launcher (e.g., a blow gun/tube).

71. Claim 1 goes on to state “. . . a plurality of soft-projectiles having the same shape . . .” Spitballs have the same shape (i.e., substantially spherical).

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Ex.1002, 21 (“awesome spherical polymers.”). Spitballs’ packaging depicts numerous dehydrated Spitballs in a bag and several hydrated spherical Spitballs in the bottom-left corner of the package, and eight hydrated spherical Spitballs placed in front of the bottom right corner of the package. Ex. 1002, 18. The ThinkGeek listing also includes images of many hydrated SAP spheres resting in the hand of a person, and placed in a bowl. Ex. 1002, 21 These images all show that Sptiballs are a **plurality** of small, clear beads having the **same substantially spherical shape** both when hydrated. Ex.1002, 21 (“Contains: 2g of Spitballs (about 150 or so).”).



72. Spitballs also teaches soft-projectiles. Ex.1002, 21 (“Spitballs start off as small hard little spheres. Soak them in water for about 4 hours (or overnight for best results) and they will absorb water and grow up to 200 times their original

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size.”). After soaking in water, Spitballs become “slimy and squishy,” and “[i]f you throw them gently, they will bounce” or “[i]f you throw them hard enough, they will explode into mushy pieces.” Ex.1002, 21. A POSITA would have understood a “squishy” sphere that bounces and can “explode into mushy pieces” when it hits a target is a “soft-projectile.” The “squishy” and “mushy” nature of the projectile and the ability to “explode” on impact will reduce the force of the impact, such that a POSITA would have understood it is softer than, e.g., a hard plastic projectile. Further, they are “soft-projectiles” by virtue of being hydrated SAPs that absorb 100x or more their weight in water.

73. Claim 1 goes on to state “. . . each soft projectile being formed from hydrated super absorbent polymer.” In the ITC Case the ALJ construed “super absorbent polymer” to mean a “polymer that can absorb an extremely large amount of liquid relative to its own mass.” First, Spitballs are “spherical **polymers**.” Ex.1002, 21. Second, Spitballs can “Grow[] 200x Their Size!” when hydrated. Ex.1002, 18, 21 (when soaked “in water for about 4 hours (or overnight for best results),” they “will absorb water and grow up to 200 times their original size.”). Further, based on my discussions with Dr. Reitman, I understand that Spitballs have the well-known properties associated with SAPs and absorb an extremely large amount of liquid relative to its own mass.

74. In my opinion, Spitballs teaches all of the limitations of Claim 1 and thus anticipates Claim 1.

B. Claim 4

75. Claim 4 recites “The ammunition of claim 1, wherein the soft-projectiles are substantially spherical.” Spitballs are described as “spherical polymers” and are depicted in every image as being substantially spherical. Ex.1002, 21. Thus, Spitballs discloses the additional limitation of Claim 4 and, in my opinion, anticipates Claim 4.

X. Peev In Combination With Spitballs Renders Claims 1-15, 17 and 19-21 Obvious

A. Motivation to Combine Peev and Spitballs

76. Peev discloses an airsoft gun. Prior to 2010 it was known that while airsoft guns are a lot of fun to play with, they fire hard plastic ammunition, and that ammunition can hurt and even cause injury. In a 2008 article from Bleacher Report, entitled “Airsoft Guns: A Double Edge Sword”, the author acknowledges that airsoft guns are fun to play with, but at the same time there is a risk of injury because the rounds are made of hard plastic and they can “crack the skin and even cause minor bleeding.” Ex. 1005, pg. 3.

77. Prior to 2010, Spitballs were softer projectiles (“Will bounce and/or explode into mushy parts on impact” Ex. 1002, 21) that could be used in place of the hard spherical plastic ammunition to address the injury problem.

78. There was a finite number of ammunition options that a POSITA could have considered that would have a reasonable expectation of success in an airsoft gun such as Peev, including rubber, cork, foam, and soft plastics, such as SAPs. Based on my discussions with Dr. Reitman I understand that SAPs were known to be easily adjustable as to size, shape and softness. This is a significant advantage in adapting SAPs for use with airsoft guns. For example, the gel strength may be adjusted to ensure that the SAP ammunition does not break apart when loaded into and launched from the barrel of the gun.

79. Replacing hard plastic projectiles in an airsoft gun with soft SAP projectiles was well within the technical grasp of a POSITA as of 2009. In addition to (or as an alternative to) adjusting the SAP, a POSITA would have also known that airsoft guns could be easily adjusted. A POSITA could change the spring pressure to avoid any premature breakage of SAP projectile or could change the size of the air compression chamber to regulate the amount of force that would be exerted on the SAP projectiles.

80. In view of the foregoing (see Pars. 77-80), it is my opinion that, by February 10, 2010, a POSITA would have expected that replacing the harder injury causing ammunition of Peev with softer, safer Spitballs ammunition would have been a success.

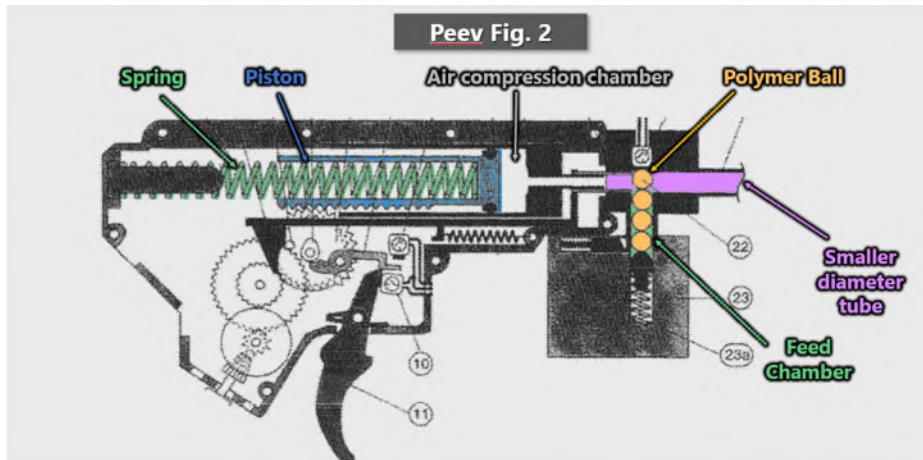
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81. Peev and Spitballs are in the same field of endeavor, namely, launchers and ammunition used for fun. Peev teaches an airsoft gun that can be used for fun in games that launches spherical bullets. Spitballs teaches spherical ammunition that can be launched for fun and games. In fact, airsoft guns and Spitballs were both found in the Cube Warfare section (“Cube” is short for cubicle) of the Thinkgeek website. See Paras. 62-65, *supra*.

82. A POSITA would have recognized that combining air guns, such as Peev’s toy gun with Spitballs’ hydrated SAP projectiles, is a simple substitution of one known element (spherical hydrated SAP soft-projectiles) for another known element (Peev’s spherical hard bullets) to obtain predictable results (a safer air gun that preserves the fun of the gun).

B. Claim 1

83. Claim 1 recites “Ammunition configured for use with a projectile launcher...”. Peev teaches a plurality of hard polymer spheres that are ammunition configured for use with the projectile launcher of Peev.



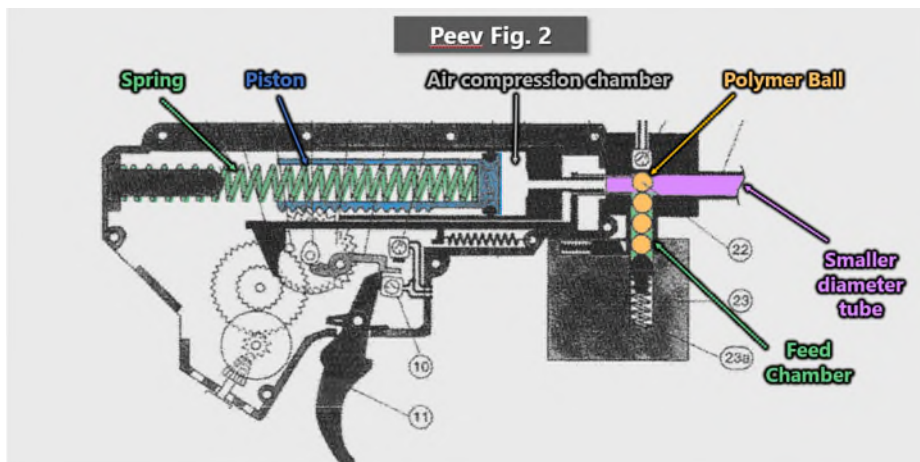
84. Claim 1 goes on to state “. . . a plurality of soft-projectiles having the same shape . . .” Peev discloses a plurality of “spherical bullets” (i.e., projectiles) having the same shape (i.e., substantially spherical). Spitballs discloses a plurality of soft spherical projectiles having the same shape. Ex. 1003, 31-32. A POSITA would have been motivated to use the plurality of soft projectiles having the same spherical shape (Spitballs) in place of the plurality of hard projectiles having the same spherical shape of Peev for the reasons set for in paragraphs 77-83 above.

85. Claim 1 goes on to state “. . . each soft projectile being formed from hydrated super absorbent polymer.” Spitballs discloses soft projectiles formed from hydrated SAPs. Ex. 1002, 21.

86. In my opinion, Peev in combination with Spitballs renders Claim 1 obvious.

C. Claim 2

87. Claim 2 states “The ammunition of claim 1, wherein the ammunition is disposed within a feed chamber of the projectile launcher.” Peev discloses the limitation added by this claim. Peev describes how during firing process of a toy gun, a “pellet of the magazine” is allowed to enter the chamber of the barrel Ex.1003, 24. As shown in the annotated Peev drawing below, the feed chamber in the magazine containing several pellets is highlighted in green and the ammunition is highlighted in yellow. Ex. 1003, 39. At the time of the alleged conception date, it would have been obvious to a POSITA to replace the hard spherical ammunition in Peev’s feed chamber with soft-spherical SAP ammunition (Spitballs) for the reasons set for in paragraphs 77-83 above.



88. In my opinion, Peev in combination with Spitballs renders Claim 2 obvious.

D. Claim 3

89. Claim 3 states "The ammunition of claim 2, wherein the feed chamber is in selective communication with a barrel of the projectile launcher." Peev teaches that "the sector wheel 5 pulls back the piston 47, tightens the spring 46, pulls back the nozzle 45 through the connecting plate 44 and allows the ball 22 under the pressure of the spring 23a to enter the chamber of the barrel 21." Subsequently, "the connecting plate ... returns forward, pushing the nozzle 45 forward, and it inserts the ball 22 into the barrel 21." Ex. 1003, 31-32. Accordingly, the nozzle member sometimes blocks the feed chamber from providing ammunition into the barrel, and sometimes permits the feed chamber to provide ammunition into the barrel.

90. In my opinion, Peev in combination with Spitballs renders Claim 3 obvious.

E. Claim 4

91. Claim 4 states "The ammunition of claim 1, wherein the soft projectiles are substantially spherical." Spitballs teaches "soft-projectiles [that] are substantially spherical." Peev likewise discloses "polymer balls." Ex. 1003, 23. A POSITA would have found it obvious to use Spitballs' substantially spherical soft-projectiles in place of Peev's "polymer balls," for the reasons set for in paragraphs 77-83 above and would have been motivated to make hydrated SAP ammo spherical to minimize modifications needed (if any) and to ensure the gun works optimally.

92. In my opinion, Peev in combination with Spitballs renders Claim 4 obvious.

F. Claim 5

93. Claim 5 states "The ammunition of claim 4, wherein the soft- projectiles have a diameter of less than about 10 millimeters." Peev teaches an airsoft gun, described as using polymer balls with a diameter of 6 mm. Ex. 1003, 23. Based on my discussions with Maureen Reitman, a POSITA would have been able to adjust the size of hydrated Spitballs to obtain a 6mm diameter soft-projectile, which is less than about 10 mm.

94. In my opinion, Peev in combination with Spitballs renders Claim 5 obvious.

G. Claim 6

95. Claim 6 states "The ammunition of claim 4, wherein the soft- projectiles have a diameter greater than about 4 mm and less than about 9 mm." Peev teaches an airsoft gun, described as using polymer balls with a diameter of 6 mm. Ex. 1003, 23. Based on my discussions with Maureen Reitman, a POSITA would have been able to adjust the size of hydrated Spitballs to obtain a 6mm diameter soft-projectile, which is greater than about 4 mm and less than about 9 mm.

96. In my opinion, Peev in combination with Spitballs renders Claim 6 obvious.

H. Claim 7

97. Claim 7 states "The ammunition of claim 2, wherein the super absorbent polymer has a crosslinking density sufficient to prevent the soft-projectiles from breaking apart when launched from the projectile launcher." Spitballs can withstand compressive forces, such as bouncing. Ex.1002, 21 ("If you throw them gently, they will bounce"; "Will bounce ... on impact."). Spitballs can "explode into mushy parts on impact" and are shown being launched by air pressure. Ex.1002, 18, 21. Because Spitballs can withstand compressive forces associated with bouncing and can fly through the air and explode on impact, a POSITA would have understood Spitballs will not break apart when launched from a projectile launcher (such as Peev) via air pressure and, thus, have a sufficient crosslinking density.

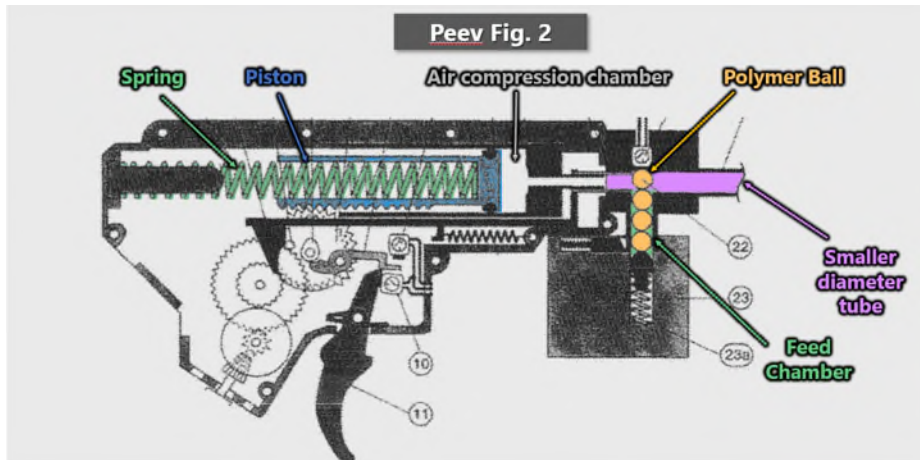
98. Based on my discussions with Dr. Reitman, I understand that a POSITA would be able to design hydrated SAP ammo that does not break apart when launched from a projectile launcher. If a hydrated SAP broke apart when launched, A POSITA would be capable of making routine modifications to the hydrated SAP and/or the projectile launcher to prevent the projectile from breaking apart. For example, in order to prevent the projectile from breaking apart, according to one approach, a POSITA would have adjusted the firing force of an air gun by using a lighter spring and/or reducing the difference in diameter between the air compression chamber and the barrel. Similarly (based on my discussions with Dr.

Reitman), in the alternative, a POSITA would have been fully capable of designing hydrated SAPs to withstand greater compressive forces (e.g., air pressure supplied during firing) by increasing the crosslinking of the polymer.

99. In my opinion, Peev in combination with Spitballs renders Claim 7 obvious.

I. Claim 8

100. Claim 8 states "A projectile launcher including the ammunition of claim 1 disposed within a feed chamber of the projectile launcher, and wherein the projectile launcher is adapted to load a soft-projectile from the feed chamber to a firing position." Peev discloses a projectile launcher having a feed chamber, wherein the projectile launcher is adapted to load a soft-projectile from the feed chamber to a firing position. See Ex. 1003, 31-32. As shown, annotated below, in Fig. 2 of Peev a feed chamber (highlighted in green) containing projectiles includes a spring 23 for loading the projectiles 22 (highlighted in yellow) into a firing position within the barrel of the launcher. See Ex. 1003, 31-32, 39.



101. It would have been obvious to a POSITA to replace the hard spherical ammunition in Peev's feed chamber with soft-spherical SAP ammunition (Spitballs) for the reasons set for in paragraphs 77-83 above.

102. In my opinion, Peev in combination with Spitballs renders Claim 8 obvious.

J. Claim 9

103. Claim 9 states "The projectile launcher of claim 8, wherein the projectile launcher is a toy." Peev discloses that electric airsoft guns can be used for fun in airsoft games. Ex. 1003, 23. An airsoft gun used for fun and games, as described in Peev, is a toy.

104. In my opinion, Peev in combination with Spitballs renders Claim 9 obvious.

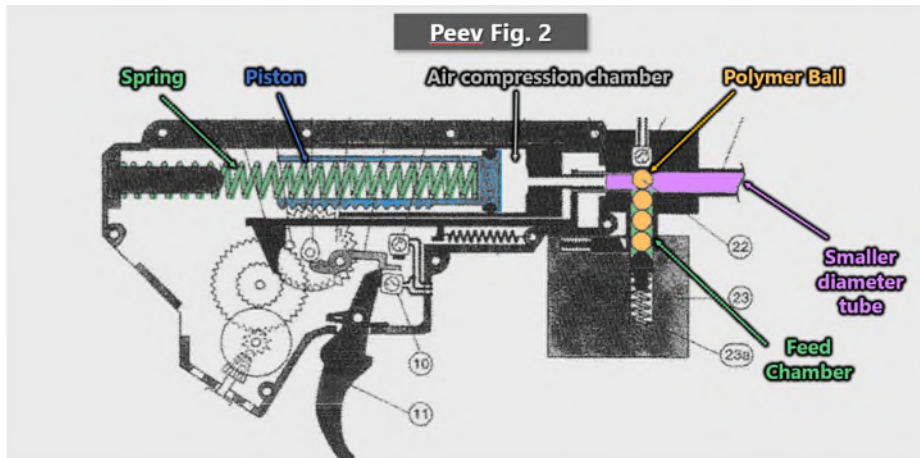
K. Claim 10

105. Claim 10 states "The projectile launcher of claim 8, wherein the projectile launcher is in the shape of a gun." Peev discloses a projectile launcher in the shape of a gun Ex. 1003, 23 ("Electric airsoft guns[1] externally represent a copy of real firearms") Further, Figures 1-3 of Peev depict a gun-shaped projectile launcher. See Ex. 1003, 39-41.

106. In my opinion, Peev in combination with Spitballs renders Claim 10 obvious.

L. Claim 11

107. Claim 11 states "The projectile launcher of claim 8, wherein the feed chamber is provided within a magazine." As shown in Figure 2 of Peev, annotated below, Peev discloses a feed chamber that includes storage for projectiles, *i.e.* a magazine. See Ex. 1003, 24, 38-40. The '282 Patent states that a magazine can be "any container that holds super absorbent polymer projectiles," it can be "of any shape size or volume." Ex. 1001, 3:30-35.



108. In my opinion, Peev in combination with Spitballs renders Claim 11 obvious.

M. Claim 12

109. Claim 12 states "The projectile launcher of claim 8, wherein the soft-projectiles are substantially spherical." Spitballs teaches "soft-projectiles [that] are substantially spherical." Peev likewise discloses "polymer balls." Ex. 1003, 23. A POSITA would have found it obvious to use Spitballs' substantially spherical soft-projectiles in place of Peev's "polymer balls," for the reasons set for in paragraphs 77-83 above and would have been motivated to make hydrated SAP ammo spherical to minimize modifications needed (if any) and to ensure the gun works optimally.

110. In my opinion, Peev in combination with Spitballs renders Claim 12 obvious.

N. Claim 13

111. Claim 13 states "The projectile launcher of claim 8, wherein the super absorbent polymer has a cross linking density sufficient to prevent the soft-projectiles from breaking apart when launched from the projectile launcher." Spitballs can withstand compressive forces, such as bouncing. Ex.1002, 21 ("If you throw them gently, they will bounce"; "Will bounce ... on impact."). Spitballs can "explode into mushy parts on impact" and are shown being launched by air pressure. Ex.1002, 18, 21. Because Spitballs can withstand compressive forces associated with bouncing and can fly through the air and explode on impact, a POSITA would have understood Spitballs will not break apart when launched from a projectile launcher (such as Peev) via air pressure and, thus, have a sufficient crosslinking density.

112. Based on my discussions with Dr. Reitman, I understand that a POSITA would be able to design hydrated SAP ammo that does not break apart when launched from a projectile launcher. If a hydrated SAP broke apart when launched, A POSITA would be capable of making routine modifications to the hydrated SAP and/or the projectile launcher to prevent the projectile from breaking apart. For example, in order to prevent the projectile from breaking apart, according to one approach, a POSITA would have adjusted the firing force of an air gun by using a lighter spring and/or reducing the difference in diameter between the air compression chamber and the barrel. Similarly (based on my discussions with Dr.

Reitman), in the alternative, a POSITA would have been fully capable of designing hydrated SAPs to withstand greater compressive forces (e.g., air pressure supplied during firing) by increasing the crosslinking of the polymer.

113. In my opinion, Peev in combination with Spitballs renders Claim 13 obvious.

O. Claim 14

114. Claim 14: "The projectile launcher of claim 8, wherein the projectile launcher is designed to use air pressure to launch the soft-projectiles." Peev teaches the use of air pressure to launch a projectile. Specifically, "piston 47, under the pressure of spring 46, accelerates forward and compresses the air in the cylinder 48, inserting it through the nozzle into the barrel 21 and firing ball 22." Ex. 1003, 32. A POSITA would have been motivated to use the plurality of soft projectiles having the same spherical shape (Spitballs) in place of the plurality of hard projectiles having the same spherical shape of Peev for the reasons set for in paragraphs 77-83, above.

115. In my opinion, Peev in combination with Spitballs renders Claim 14 obvious.

P. Claim 15

116. Claim 15 states "The projectile launcher of claim 8, further comprising a firing mechanism that stores energy independent of a user." Peev describes an

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electric motor 30, which drives a sector gear wheel 5. When driven by the motor, the sector wheel “pulls back the piston 47” and “tightens the spring 46”. Ex. 1003, 31. Thus, energy is stored in the firing mechanism, namely the spring 46, independently of the user. The energy is released when the trigger is pulled. This contrasts with Claim 16 which is directed to launchers that are incapable of storing energy independent of a user, examples of which are shown in Figures 1 and 2 of the ‘282 Patent.

117. In my opinion, Peev in combination with Spitballs renders Claim 15 obvious.

Q. Claim 17

118. Claim 17 states “The projectile launcher of claim 8, further comprising a firing mechanism that directly applies a force to a soft-projectile located in the firing position to launch the soft-projectile from the projectile launcher in free flight.” Peev teaches a firing mechanism that directly applies a force to a projectile. Specifically, “piston 47, under the pressure of spring 46, accelerates forward and compresses the air in the cylinder 48, inserting it through the nozzle into the barrel 21 and firing ball 22.” Ex. 1003, 32.

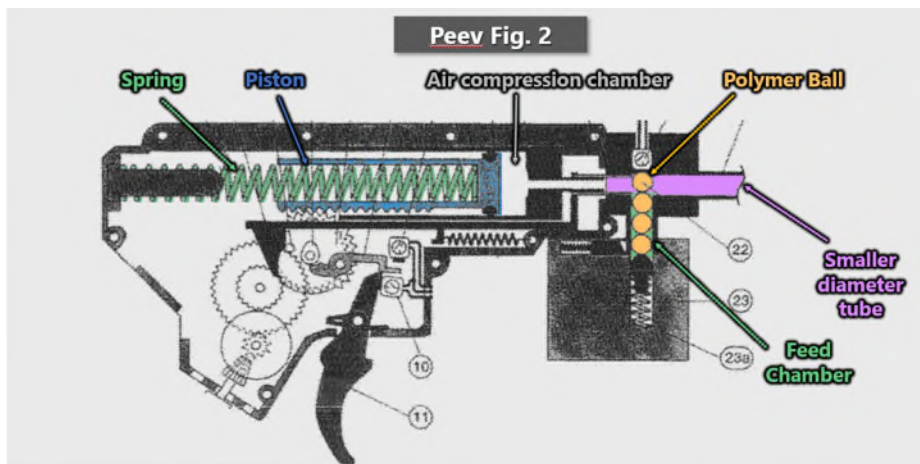
119. It was Patent Owner’s position in the ITC Case that is using a spring, piston, and air compression chamber to compress air to launch a projectile constitutes a “direct” application of force. Ex. 1021, 19-21, 24-26. The air pressure

generated by the piston in the airsoft-type firing mechanism of Peev directly applies a force to the “spherical bullets” under Patent Owner’s interpretation.

120. In my opinion, Peev in combination with Spitballs renders Claim 17 obvious.

R. Claim 19

121. Claim 19 recites “The projectile launcher of claim 8, further comprising: an air compression chamber; . . .” Peev discloses an air compression chamber, namely “cylinder 48”, shown below in annotated Fig. 2 of Peev. Ex. 1003, 39. Peev discloses how when firing a “piston 47, under the pressure of spring 46, accelerates forward and compresses the air in the cylinder 48, inserting it through the nozzle into the barrel 21 and firing ball 22.” *Id.* At 32.



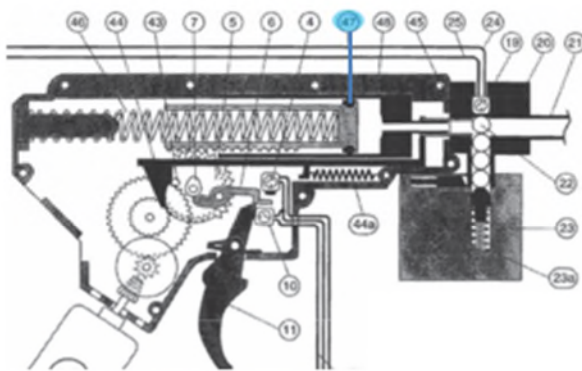
122. Claim 19 goes on to state “a piston disposed within and axially aligned with the air compression chamber; . . .” Peev discloses how when firing a “piston 47, under the pressure of spring 46, accelerates forward and compresses the air in

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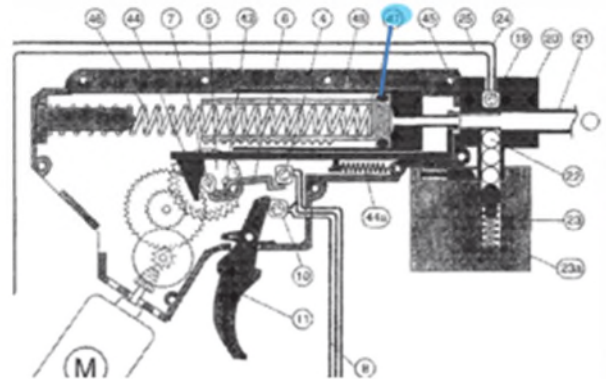
the cylinder 48, inserting it through the nozzle into the barrel 21 and firing ball 22.”

Ex. 1003, 32. As shown below in annotated Fig. 2 of Peev, piston 47 is disposed within and axially aligned with the air compression chamber, cylinder 48. *Id.* at 39.

123. Claim 19 further states “a spring operatively arranged to bias the piston toward a rest position from a cocked position within the air compression chamber.” Peev discloses that a piston 47, which has been previously pulled back into a cocked position subsequently “under the pressure of spring 46, accelerates forward and compresses the air in the cylinder 48...” Ex. 1003, 31-32. Figs. 2 and 3 of Peev, shown excerpted below, illustrate the cocked and rest position of piston 47 (shown in blue), respectively. Ex. 1003, 39-40.



Peev Fig. 2

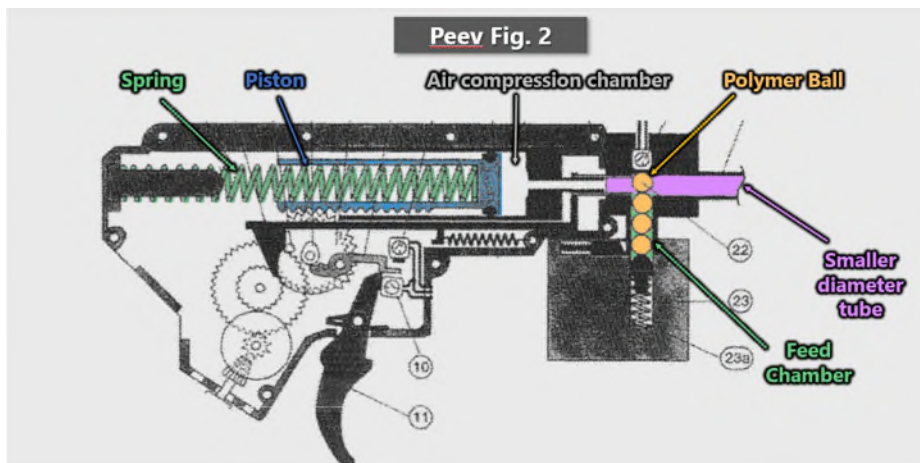


Peev Fig. 3

124. In my opinion, Peev in combination with Spitballs renders Claim 19 obvious.

S. Claim 20

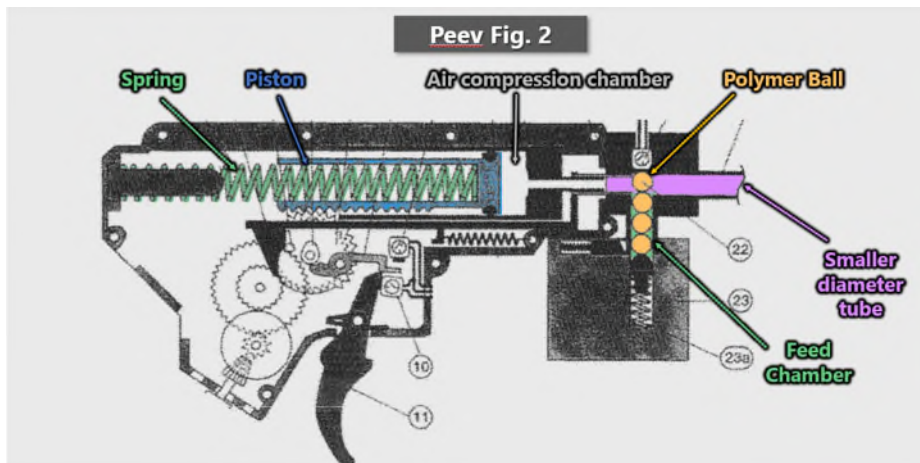
125. Claim 20 recites “The projectile launcher of claim 19, further comprising a smaller diameter tube in communication with the air compression chamber, and . . .” As shown below, Peev discloses an air compression chamber 48 in communication with a smaller diameter tube. Specifically, during the firing stage, a piston “compresses the air in the cylinder 48, inserting it through the nozzle into the barrel 21...”. Ex. 1003, 32, 39. As shown in annotated Fig. 2 of Peev, the projectile launcher of Peev includes a smaller diameter tube in communication with the air compression chamber.



126. Claim 20 goes on to state “wherein a biasing force of the spring is sufficient to cause the piston to move from the cocked position to the rest position to force air from the air compression chamber into the smaller diameter tube and cause a soft-projectile located at the firing position to accelerate and be launched from the projectile launcher.” Peev discloses that during the firing stage, a piston

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47 “under the pressure of spring 46, accelerates forward and compresses the air in the cylinder 48, inserting it through the nozzle into the barrel 21 and firing the ball 22”. Ex. 1003, 32, 39. As shown in annotated Fig. 2 of Peev, the projectile launcher of Peev includes a smaller diameter tube in communication with the air compression chamber. A POSITA would have been motivated to use the plurality of soft projectiles having the same spherical shape (Spitballs) in place of the plurality of hard projectiles having the same spherical shape of Peev for the reasons set for in paragraphs 77-83, above.



127. In my opinion, Peev in combination with Spitballs renders Claim 20 obvious.

T. Claim 21

128. Claim 21 states "The projectile launcher of claim 8, wherein the absorbency of the super absorbent polymer is sufficiently limited to allow the soft-projectiles to be launched from the projectile launcher without breaking apart." In

the ITC Case, Patent Owner asserted that this claim limitation was met so long as the soft-projectile does not break apart when launched from the projectile launcher. Ex.1021, 32-35. A POSITA would have understood Spitballs will not break apart when launched from a projectile launcher via air pressure, and Peev in combination with Spit Balls renders obvious a launcher with hydrated SAP ammunition that will not break apart when launched. See paragraphs 108 and 109 above.

129. In my opinion, Peev in combination with Spitballs renders Claim 21 obvious.

U. Secondary Considerations

1. Simultaneous Invention

130. Korean Patent Publication No. 20-2010-0004855 to Kim (Ex. 1022) is evidence of simultaneous invention and supports a finding of obviousness.

131. According to Kim, it was filed in the Korean Intellectual Property Office on November 1, 2008, before the priority date of the '282 Patent. Ex. 1022, 7. It was published on May 11, 2010, one day after the May 10, 2010 filing date of the '282 Patent. *Id.* Under the heading "Prior Art", Kim explains that "[c]onventional bullets are made of hard materials and some people become disabled." *Id.*, 8. Kim solves the problem of "injury to the human body" by forming toy bullets from "gel or gel material". *Id.*, 7. The toy gun of Kim uses air pressure to fire the gel bullet, which is "safer to use than a bullet of a conventional rigid

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material structure and does not cause injury to the human body.” *Id.* Claim 1 of Kim broadly covers all gel materials (*Id.*, 8), which are soft and prevent injury, just like SAP projectiles such as Clear Spheres and Spit Balls. Dependent Claim 2 specifies that gel material is made of a cleaning substance and dependent Claim 3 specifies that the gel material is luminous. *Id.*

132. Kim recognized the same problem at the same time as the named inventors on the ‘282 Patent. Kim arrived at the same solution for the same reasons. This evidence of simultaneous invention supports a finding that the ‘282 Patent is obvious and therefore invalid.

133. A video posted by Vat19 to YouTube (Ex. 1023) is also evidence of simultaneous invention and supports a finding of obviousness.

134. I understand that by December 20, 2010, Vat19 posted a video to YouTube featuring Spitballs and depicting two men launching Spitballs at each other. Ex.1023. The video explains, “Spitballs are fascinating little projectiles perfect for launching at just about anything,” while inserting a Spitball into a straw and launching it at his colleague. Ex.1023. The video explains how long you leave them in is up to you, and adjusts the size:



135. The Vat19 video states “Bigger Spit Balls will explode easily,” “while smaller Spit Balls are durable and bouncy.” Ex. 1023. “They’re also perfect for shooting from a straw or tube.” *Id.*



2. Commercial Success

136. In the ITC Case Patent Owner’s expert Dr. Kudrowitz testified that the Xploderz products sold by the Maya Group (the former owner of the ‘282 Patent)

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were commercially successful, relying on sales of the Maya Group blasters in 2011 and 2012, and certain testimony of Mr. Ron Brawer, a Maya Group executive and one of the named inventors on the '282 Patent.

137. However, Patent Owner's marketing expert, Lynn Rosenblum, testified "that the packaging and advertising focus of the Xploderz and Blaster Pro products was on the apparent product differentiators of these products, i.e., their firing distance, ammunition capacity, and ease of use." Ex. 1004, 581:17-582:9. None of the Challenged Claims cover "firing distance, ammunition capacity, and ease of use."

138. Mr. Brawer testified that the commercial success of the Xploderz products was the result of the ability of these products to hold more ammunition and to shoot the ammunition twice as far as competitive Nerf products, and that both of these features resulted from the use of SAP ammunition. As also discussed below, ultimately Mr. Brawer testified that the use of SAP as ammunition was the primary force driving demand and was the "foundation of the line". Ex. 1013, 293:16-20. However, as discussed above, SAP ammunition (Spitballs) was in the prior art.

139. As to the important "more ammunition" feature, Mr. Brawer testified that it was the result of using SAP as ammunition:

Q. There's a second bullet here that says, "**Holds More Rounds** in the Magazine!" Do you see that?

A. Yes, I do.

Q. And what is this reference to being able to hold more rounds in the magazine a reference to?

A. Well, if you were to take 70 rounds and develop them for shooting in the Xploderz/Blasterz product, it was a container smaller than a soda can. And if you were to try and take 70 rounds of foam darts, you would be running around with something the size of a shoebox. And so ***the physical quality of the SAP as an ammunition, because it was much smaller, allowed for you to*** easily maneuver and hold and ***carry with you a much larger number of rounds*** of ammunition.

Q. So, again, this use of the ***SAPs as the ammunition*** was part of what ***enabled the Xploderz*** products to ***hold more rounds*** in the magazine, which is one of the most important features in this focus group study?

A. **Yes.**

Ex. 1013, 267:7-268:8.

140. As to the important “more distance” feature, Mr. Brawer testified that it was the result of using SAP as ammunition:

Q. What was the characteristic of the Blasterz prototype that became the Xploderz product that

contributed to that important feature of being able to
shoot twice as far as comparable products like NERF?

A. A ***different ammunition*** system.

* * *

Q. And in your mind, the ***use of the SAPs as the ammunition*** was part of what enabled the Xploderz products to shoot ***twice as far as*** comparable NERF products?

A. ***It was by far the most important thing.***

Ex. 1013, 266:3-8; 267:2-6; 275:4-275:9; 293:16-293:20.

141. Mr. Brawer also testified that the primary force driving demand of the Xploderz products was the use of SAPs as ammunition.

Q. Is it fair to say that ***all of the features*** of the [Xploderz] product that you used to create excitement in your TV advertising ***were directly linked to the use of SAPs as ammunition*** in your projectile launcher?

A. ***Absolutely.***

Ex. 1013, 275:4-275:9; 293:16-293:20.

142. In summary, the testimony of the Maya Group executive, Mr. Brawer, identifies three factors that drove sales of the Xploderz products; the ability to hold more ammunition, to shoot the ammunition further, and the use of SAP ammunition.

Declaration of Joel Delman 37 C.F.R. § 1.68 in Support of
Petition for *Inter Partes* Review of U.S. Patent No. 8,371,282

The first two features are unclaimed. Ammunition capacity and shooting distance appear nowhere in the Challenged Claims. It is my understanding that commercial success due to unclaimed features cannot provide a nexus to the Challenged Claims.

143. The third feature identified by Mr. Brawer as driving sales, SAP ammunition, was in the prior art (Spitballs). It is my understanding that commercial success due to a feature that was known in the prior art cannot provide a nexus to the Challenged Claims.

I hereby declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct, and that all statements made of my own knowledge are true and that all statements made on information and belief are believed to be true. I understand that willful false statements are punishable by fine or imprisonment or both. *See* 18 U.S.C. Section 1001.



Joel Delman

Dated: August 22, 2023

Exhibit A

JOEL DELMAN | InformedInnovation

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Formerly a corporate lawyer, I graduated Harvard Law School and later earned a Master's in Industrial Design at Pratt Institute. From toys to complex medical devices, I've spent the past 27 years guiding innovation through strategic product development, and have helped hundreds of clients bridge the gap between creative insight and commercial success.

EDUCATION **Pratt Institute** Master of Industrial Design, 1995
Harvard Law School J.D. 1991
New York University B.S. Economics, 1988

PROFESSIONAL EXPERIENCE

- | | |
|---------------------------------|--|
| <i>Design
Director</i> | Informed Innovation Inc.
<i>Los Angeles, CA 2018 – Present</i> <ul style="list-style-type: none">• Strategic consulting agency focused on the application of design thinking to clients' most challenging business opportunities |
| <i>Creative
Director</i> | Product Development Technologies LLC
<i>Los Angeles, CA 1999 – 2018</i> <ul style="list-style-type: none">• Promoted effective user-centered design processes in a fast-paced, multidisciplinary consulting environment• Managed all issues related to intellectual property, licensing of technology, and the many legal facets of design and development• Founded and directed PDT's Informed Innovation division, charged with generating proprietary products for license to leading manufacturers; delivered over 300% ROI• Responsible for multiple large scale programs for a diverse range of clients, from complex medical devices to mass market consumer electronics |
| <i>Associate
Professor</i> | ArtCenter College of Design
<i>Pasadena, CA August 2019 – Present</i> <ul style="list-style-type: none">• Graduate level class in portfolio development and professional practice |
| <i>Board of
Directors</i> | Metamason Inc.
<i>Pasadena, CA 2013 – Present</i> <ul style="list-style-type: none">• Healthcare focused startup capitalizing on 3D printing technologies to automate the creation of custom-fit medical devices• Engage, advise and take part in decisions impacting all aspects of corporate strategy, fundraising and governance |
| <i>Mentor &
Advisor</i> | Make in LA
<i>Los Angeles, CA 2016 – Present</i> <ul style="list-style-type: none">• Provide guidance to startups, from the perspective of product development and design strategy, at Los Angeles' first dedicated hardware accelerator |
| <i>Mentor &
Advisor</i> | The Design Accelerator
<i>Pasadena, CA 2013 – Present</i> <ul style="list-style-type: none">• Partnership among Art Center College of Design, Caltech and Idealab implementing low-cost management techniques to help design-driven tech startups grow into scalable technology businesses |

Principal

Twenty Twenty Thinking Inc.

Chicago, IL 1997 – 1999

- Invented, developed and licensed magical toy concepts, including the award-winning Bubble Bugs™ and Exclamation! Pen™
- Built successful licensing revenue stream, leveraging background in business, law and design to go head-to-head with established toy development firms

Designer

Zenith Electronics Corp.

Chicago, IL 1995 – 1997

- Managed brand development through design of next gen televisions, remotes and media devices for giant American electronics manufacturer challenged by Asian competition

Designer

Cousins Design

New York, NY 1993 – 1995

- Responsible for all phases of design process at renowned boutique firm, from initial concept development through client presentations

Attorney

Gunster, Yoakley & Stewart

West Palm Beach, FL 1991 – 1993

- Creative problem solving for a variety of complex corporate, banking and securities matters, focused on the legal needs of entrepreneurial businesses

HONORS

Chair, IDSA Design Protection Committee

(Industrial Designers Society of America)

IDSA 20/20 Award

Recognizing twenty designers who contributed to the advancement of the design profession in 2020

40+ US Patents and Patents Applied For

Dr. Toy Best New Toy, Gold Award

ID 40 Award, ID Magazine

Good Design Award, Chicago Athenaeum

CES Innovation Award, Consumer Electronics Association

Industrial Design Excellence Award (IDEA), Industrial Designers Society of America

Wall Street Journal “Form + Function” Column, Featured Designer

Becoming a Product Designer, Profiled by author and distinguished designer

Bruce Hannah

SELECT CLIENTS



Exhibit B

US Patents and Applications on Which I am Named Inventor

US Utility Patents

10,631,678
6,578,725
6,976,605
6,997,342
6,997,345
7,047,585
7,207,461
7,306,131
7,571,537
7,882,840

US Design Patents

D389,516
D468,224
D474,087
D503,320
D503,877
D511,507
D512,290
D512,617
D514,410
D515,317
D522,329
D551,665
D554,636
D555,649
D557,338

US Patent Applications

20180014681
20160250363
20160249760
20110213399
20090149804
20090137859
20070277741
20070277740
20070267333
20060076309
20050242153
20050242151
20050242150
20050077309

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20040251590

20040245267

20040245266

20030182749

20020108952

Joel Delman | Expert Witness Testimony

Facet Technologies, LLC v. Lifescan, Inc. (Utility Patent Infringement)

Date of engagement: January, 2023

Central District of California, Case No. 2:22-cv-01717-MCS-MAR

Expert for Defendant Lifescan, Inc., engaged by Carter Ledyard & Milburn LLP

Patent evaluation, Expert reports, Deposition

In the Matter of Certain Soft Projectile Launching Devices, Components Thereof, Ammunition, and Products Containing Same (Utility Patent Infringement)

Date of engagement: October, 2022

United States International Trade Commission Inv. No. 337-TA-1221

Expert for Defendant Daisy Manufacturing Company, engaged by Kirkland & Ellis LLP

Patent evaluation, Expert reports, Deposition, Trial testimony (ITC Hearing May 2023)

Geigtech East Bay LLC v. Lutron Electronics Co., Inc. (Trade Dress Infringement)

Date of engagement: July, 2022

Southern District of NY, Case No. 1:18-CV-05290

Expert for Defendant, engaged by Arnold & Porter LLP

Trademark evaluation, Expert report, Deposition

Proslide Technology Inc. v. Whitewater West Industries Ltd. (Design Patent Infringement)

Date of engagement: August, 2021

Middle District of Florida, Case No. 6:20-cv-02189-CEM-DCI

Expert for Defendant, engaged by Buchalter PC

Patent evaluation, Expert reports, Deposition

Panasonic Corporation v. Getac Technology Corporation (Design Patent Infringement)

Date of engagement: April, 2021

Central District of California, Case No. 8:19-cv-01118-DOC-DFM

Expert for Defendant, engaged by King & Spalding LLP

Deposition, Trial testimony (Jury trial, June 2022)

Glam and Glits Nail Design Inc. v. iGel Beauty, LLC (Design Patent, Trade Dress Infringement)

Date of engagement: December, 2020

Central District of California, Case No. 8:20-cv-00088-JVS-DFM

Expert for Plaintiff, engaged by Lapple Ubell IP Law, LLP

Deposition

Shure Inc. v. ClearOne Inc. (Design Patent Infringement)

Date of engagement: May, 2020

District of Delaware, Case No. 19-1343 (RGA) CJB)

Expert for Defendant, engaged by Hueston Hennigan LLP

Multiple depositions, Trial testimony (Jury trial, November 2021)

In the Matter of Certain Electronic Stud Finders, Metal Detectors and Electrical Scanners (Utility Patent Infringement)

Date of engagement: December, 2020

United States International Trade Commission Inv. No. 337-TA-1221

Expert for Plaintiff Zircon Corp., engaged by Palo Alto Legal Group

Deposition, Trial testimony (Bench trial, June 2021)

*Town and Country Linen Corp. v **Ingenious Designs LLC et al***
(Design Patent Infringement, Trade Secret Misappropriation)

Date of engagement: January, 2020
Southern District of New York, Case No. 1:18-cv-05075-LGS
Expert for Defendant, engaged by Baker & Hostetler LLP
Deposition

*Lanard Toys Ltd. v. **Anker Play Products LLC*** (Design Patent, Trade Dress, Copyright Infringement)

Date of engagement: June, 2020
Central District of California, Case No. 2:19-cv-04350-RSWL-AFM
Expert for Defendant, engaged by Seyfarth Shaw LLP
Deposition

*MGA Entertainment, Inc. v **Zuru LLC*** (Trade Dress Infringement)

Date of engagement: January, 2020
California Superior Court, Case No. 19-chc-00599
Expert for Defendant, engaged by Dentons LLP
Deposition, Trial testimony (Bench trial, March 2020)

*Rhino Metals Inc. v. **Sturdy Gun Safe, Inc.*** (Trade Dress and Design Patent Infringement)

Date of engagement: August, 2019
Idaho District Court, Case No. 1:18-cv-00474-EJL
Expert for Defendant, engaged by Givens Pursley LLP
Deposition

*LILLEbaby LLC v. **BabySwede LLC et al*** (Utility Patent Infringement)

Date of engagement: June, 2019
In the Matter of Certain Child Carriers and Components Thereof
United States International Trade Commission Inv. No. 337-TA-1154
Ohio Northern District Court, Case No. 1:19-cv-00504-JG
Expert for Defendant, engaged by Dorsey & Whitney LLP
Deposition

Spigen Korea Co., LTD.** v. **Ultraproof, Inc. et al (Design Patent Infringement)

Date of engagement: August, 2018
California Central District Court, Case No. 2:17-cv-01161-DOC-DFM
United States Court of Appeals for the Federal Circuit, Case: 19-1435
Expert for Plaintiff, engaged by Lewis Brisbois Bisgaard & Smith LLP
Deposition

*C&A Marketing, Inc. (dba Polaroid) v. **GoPro Inc.*** (Design Patent Infringement)

Date of engagement: January, 2017
District Court of New Jersey, Case No. 1:15-7854-RMB-JS
Expert for Defense, engaged by Kilpatrick Townsend & Stockton LLP
Deposition

Exhibit D

General Articles and Publications

Going In Blind: Redesigning the Next Generation Perkins Braille, Product Design & Development Magazine, November 11, 2010

Are Amazon, Netflix and Google Making Too Many Decisions for Us?, Forbes, November 24, 2010

Design in 2010: Four Emerging Trends in Technical Product Design, Engineering Exchange Magazine, April 5, 2010

4 Reasons Why 3D TV is Years Away from Adoption, MediaShift, May 18, 2010

Economic Recession Doesn't have to Halt Innovative Product Development, Design Manufacturing News, March 31, 2011

Cost vs. Quality: The Dangers of Outsourcing Design Overseas, Appliance Design Magazine, August 10, 2011

The Consumerization of Medical Products, Medical Product Outsourcing Magazine, August 31, 2011

Design that Transforms the Eating Experience, Bloomberg.com, January 5, 2012

The Los Angeles Perspective on CES: Guest Blogger CES 2013, LAObserved, January 2013

Does Design + Celebrity = Innovation? Innovation Excellence Magazine, March 12, 2013

Publications by Product Development Technologies Inc.

Asian Design: A Look at the Landscape, PDT Pulse June 2008

PDT Pulse: CES Trends 2013, February 2013

PDT Pulse: E3 Electronic Entertainment Expo Trends 2013, June 2013

PDT Pulse: CES Trends 2014, February 2014

PDT Pulse: E3 Electronic Entertainment Expo Trends 2014, June 2014

PDT Pulse: CES Trends 2015, February 2015

PDT Pulse: NAFEM Trends 2015, March 2015

PDT Pulse: E3 Electronic Entertainment Expo Trends 2015, June 2015

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PDT Pulse: Trends in Medical and Healthcare Solutions, August 2015

PDT Pulse: CES Trends 2016, February 2016

PDT Pulse: POC Medical Diagnostics Trends, April 2016

PDT Pulse: E3 Electronic Entertainment Expo, Virtual Reality Past, Present and Future, June 2016

PDT Pulse: CES Trends 2017, February 2017

PDT Pulse: E3 Electronic Entertainment Expo Trends 2017 June 2017

Speaking Engagements

The Future of Food Preparation, California State University Long Beach Duncan Anderson Lecture Series, November 10, 2011

Research as the Foundation to Great Design, Southern California Biomedical Council MedTech Design Forum, May 31, 2012

Design Patents and Defining the Article of Manufacture: An Expert Witness Plays Devil's Advocate; Orange County Intellectual Property Law Association, April 19 2018.

Design Patents and Defining the Article of Manufacture: An Expert Witness Plays Devil's Advocate; CLE Webinar for The TASA Group, February 21, 2019.

The Good, The Bad and The Ugly: How Recent Design Patent Cases Impact Design Protection; Webinar for IDSA, August 25, 2020

Legal Contracts for Designers: (Almost) Everything You Need to Know; Presentation at the IDSA International Design Conference, September 17, 2020

Interviews

Delivering Realizable Solutions Through Informed Innovation, Market News First (MN1), March 9, 2007

How are you Influencing ER and Surgical Devices?, Medical Design Technology Magazine, November 17, 2010

Live from the Medical Design and Manufacturing Expo: The Latest Trends in Medical Devices, CBS Los Angeles Newsradio KNX10.70, February 2015

Navigating CES and Passenger Experience Trends, Airline Passenger Experience Association, January 8 2016

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Design Mysteries with Bruce Hannah
Apple Podcast, January 2022