EXHIBIT 1

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            BEFORE THE UNITED STATES OF AMERICA
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             CONSUMER PRODUCT SAFETY COMMISSION
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    In the Matter of:
    ZEN MAGNETS, LLC : CPSC Docket No. 12-2
6
    STAR NETWORKS USA, LLC : CPSC Docket No. 13-2
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              Respondents. :
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12
                DEPOSITION OF DAVID A. RICHTER
13
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15
                             Bethesda, Maryland
16
                             Thursday, July 24, 2014
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19
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    REPORTED BY:
21
       SARA A. WICK, RPR, CRR
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- sale of Buckyballs. And I learned this in the news
- 2 somewhere.
- And then I was -- I researched, somehow I
- 4 learned about Zen Magnets holding this essay
- 5 contest. And I wrote this essay, basically a letter
- 6 to the Commissioners. That's how I became
- 7 acquainted with Zen Magnets, by basically writing
- 8 this essay, which --
- 9 Q And the essay you're referring to is
- 10 Exhibit 6?
- II A Is Exhibit 6, that's right.
- 12 Q And I want to summarize just for clarity.
- 13 That essay that is Exhibit 6, the 9 August, 2012,
- letter is something that you wrote in an essay
- 15 contest that Zen Magnets sponsored?
- A That's right.
- If I'm correct as well, you actually won a
- 18 prize for writing Exhibit 6?
- 19 A That's true.
- Q And what did you win?
- 21 A I won a Mandala set.
- Q And that is the multiple -- the set of

- l like 1,700-plus magnets?
- 2 A It's 12 cubed, right, 1,728.
- Q And that was sort of a reward for having
- 4 written this; is that right?
- A As far as I know, that was the -- that was
- 6 the grand prize.
- 7 Q Had you heard of Zen Magnets before you
- 8 entered that contest?
- 9 A I don't remember. I think I had, because
- 10 I had bought -- I bought Buckyballs in like winter
- II of 2012, like in February or March of 2012. And I
- 12 think before that I had been sort of shopping for
- 13 them because I knew that they existed. I had seen
- 14 them in museum gift shops, and I knew I had to get
- 15 some. I wanted to get some. So I did a little
- 16 research on the Internet, basically looking at what
- 17 people said about, you know, the difference between
- 18 the different brands of magnets.
- 19 Q And I just want to ask for clarity -- by
- the way, if you want, I can have the reporter read
- 21 back your answer. But when you said "they," is it
- 22 correct that you were referring to Zen Magnets as

- 1 sets of magnets?
- 2 A I do. I bought -- in summer of 2012 when
- I thought they were going to become scarce, I bought
- 4 a few sets of Zen Magnets.
- 5 Q And do you recall what sets you bought?
- 6 A Yeah. I bought some of the regular sized
- 7 Zen -- I don't know what the name of them are
- 8 called, but I think they're called Zen, the one that
- 9 have 216 magnets. I bought seven of those. And I
- 10 won -- sorry. By entering the contest, you were
- 11 awarded a set of Zen Magnets.
- O Uh-huh.
- 13 A So anybody who entered got a set.
- Q Okay. But you got the super-duper set?
- 15 A I won the super-duper set, Mandala set.
- 16 Q So is it correct that you got a regular
- 17 set for entering and a Mandala set for winning?
- 18 A Right.
- 19 Q Okay. And so I guess I'm just trying to
- add -- and you're the math professor, so you've got
- 21 to correct my addition -- one set of Buckyballs in
- 22 2012, seven sets of Zen Magnets in the summer of

- 1 2012?
- A No. I purchased seven, and I was awarded
- one Zen just for entering the contest.
- 4 Q And I said that wrong, because I think in
- 5 sum total you have nine sets of Zen Magnets; is that
- 6 right?
- 7 A That's right.
- 8 Q Eight magnets of 216 per set -- excuse me.
- 9 Eight sets of 216 per set and one set, the Mandala
- 10 set, with 1,728 magnets?
- 11 A That's right.
- 12 Q And all of those sets came with spares, to
- 13 your knowledge?
- 14 A Yes.
- 15 Q What have you used the magnets for? How
- have you used them?
- 17 A I have used them mainly for making
- 18 geometrical models in my office.
- Now, just to make sure, we talked about
- your nine Zen sets and your one Buckyball set. Is
- that all the magnets you've ever bought?
- 22 A Surely not. I mean, I've owned -- buying

- LLC's and Respondent Star Networks, LLC's
- 2 Identification of Expert Witnesses."
- Do you see that?
- 4 A Yes.
- 5 Q Look at it all you like, Dr. Richter, but
- 6 I'm going to refer you to the second and third full
- 7 paragraphs on page 2. Tell me when you've had a
- 8 chance to look at it.
- 9 A Pardon?
- 10 Q Please take whatever time you wish to look
- 11 at the document. I'm going to refer you to the
- second and the third full paragraphs on page 2 of
- 13 Exhibit 2. Please let me know when you've had a
- 14 chance to look at the exhibit.
- 15 A I've read it.
- 16 Q Have you seen this document before?
- 17 A I don't know. I don't recall.
- 18 Q I'm going to refer you to the second full
- 19 paragraph on page 2, which states your name and
- 20 address and then says "Dr. Richter is expected to
- 21 testify about the utility of earth magnets."
- Do you see that?

- 1 A Yes, I do.
- 2 Q And I want to ask if that is the opinion
- 3 that you are here today to express.
- 4 A It is.
- 5 Q And I'm going to refer to the next
- 6 paragraph. "Professor Richter has prepared a
- 7 statement for the CPSC as part of its rule-making
- 8 procedures and that statement is served herewith and
- 9 incorporated herein as Respondent Expert ID Exhibit
- 10 C."
- Do you see that?
- 12 A Yes, I do.
- Q Okay. And I guess I'm going to ask you
- now to look at what's been marked as Exhibit 6, the
- 9 August, 2012, letter that we've been calling your
- 16 essay. Is that the document that's being referred
- 17 to?
- 18 A Yes.
- 19 Q It says here in the paragraph I've just
- 20 quoted that you had "prepared a statement for the
- 21 CPSC as part of its rule-making procedures."
- Do you see that?

- I which is typical, when you're tenured, you're also
- 2 promoted. Some universities still make a
- distinction between being tenured and promoted. So
- 4 generally, an assistant professor is someone who is
- not tenured, but the job is essentially the same.
- 6 Q But what this indicates is that you've not
- 7 only been promoted but you've also been granted
- 8 tenure?
- 9 A Yes.
- 10 Q Congratulations.
- II A Thank you.
- 12 Q I'm going to go through a couple things,
- 13 if that's okay. You list a number of grant
- 14 proposals on which you have worked or are working
- 15 now. And if I have it -- I guess I will just ask
- 16 this question.
- Do any of those involve either physical
- 18 modeling or modeling with high-powered, rare-earth
- magnets?
- 20 A No.
- 21 Q I'm going to move now to talk about
- 22 publications and presentations together, because you

- 1 section, "Presentations," there seem to be quite a
- few that involve physical modeling; is that correct?
- 3 A That's correct.
- 4 Q And under the "Presentations," do any of
- these modelings involve the use of high-powered,
- 6 spherical, rare-earth magnets?
- 7 A No.
- 8 O And in the two citations under "Other
- 9 Publications" on page 2 where you t mention Zome
- 10 modeling, am I correct that those also did not
- II involve the use of spherical, high-powered,
- 12 rare-earth magnets?
- 13 A Yes.
- 14 O And we talked -- under
- the "Presentations," it's such a significant list.
- 16 I will just ask a couple general questions, if
- 17 that's okay. I think that I can look through these
- 18 and see that some of the modeling involves Zome
- 19 products, some involve paper, some involve straws.
- 20 And can I ask, what other media might be
- 21 represented -- what other modeling media might be
- 22 represented under your "Presentations" as listed on

- pages 2 through 5 of your resume?
- A Well, there's the Miracle Octad Generator.
- 3 That's paper and pencil; it's like a little pencil
- 4 and paper game. I think Zome and paper is a pretty
- 5 good description and, occasionally, balls and
- 6 straws, you know, wooden balls and straws.
- 7 Q So would it be correct to say that in your
- 8 academic and teaching career, those media that you
- 9 just identified have been the predominant ones that
- you've used for teaching?
- II A Yes.
- 12 Q Has any of your research specifically
- involved magnets or the physical properties of
- 14 magnets?
- 15 A No.
- 16 Q And is it correct to say that your
- teaching to date has not involved magnets or the
- physical properties of magnets?
- 19 A Well, you're using a word, "teaching." I
- haven't used it formally in the classroom but,
- certainly, in several informal discussions with
- 22 students once in a while.

- 1 Q Okay. Can you give me any detail about
- those several formal discussions with students once
- 3 in a while?
- A Well, more often than not, it's like, what
- 5 an awesome thing, you can make the platonic solids
- 6 very quickly using these magnet balls.
- 7 Q Okay. But as stated in Exhibit 5, which
- 8 is your report, that's -- you've never used them in
- 9 the classroom before?
- 10 A That's right.
- I'm going to ask a question, because most
- of us don't understand mathematics the way you do.
- 13 Could you explain to me the fields of mathematics in
- which you're primarily interested?
- 15 A These days, it's discrete geometry, which
- is basically a modern incarnation of classical
- 17 Euclidean geometry.
- I've also done research in mathematical
- 19 physics, which is mostly involving -- mostly
- 20 involves the study of differential equations that
- occur in physics. Differential equations is a very
- complicated subject. If a physicist or chemist

- generally, you know -- every author has his own name
- 2 for them. Wikipedia calls them the mutetrahedron
- and the muoctahedron, and I don't know who authored
- 4 that.
- Do you consider yourself to be an expert
- 6 on warnings?
- 7 A No.
- 8 Q We talked about some of the things that
- 9 you've done to prepare for your deposition here
- 10 today. I just want to ask, did we cover everything?
- Did I miss anything?
- A You're the one that's asking questions.
- 13 Q And you're the one that's giving answers.
- 14 So I want to ask, have your answers to my questions
- 15 completely exhausted the subject of your preparation
- 16 for this deposition?
- A For this deposition, yes.
- 18 Q Have you ever taught at the high school
- level?
- A Again, when you say "taught," I've never
- been paid to teach, but I have engaged in -- I've
- 22 been invited to give -- I've done a Zome project

- with high school students. I've done origami
- lessons with junior high students. I've done, you
- 3 know, sort of show and tell about college, involves
- 4 higher geometry models and stuff like that.
- 5 Q Has there ever been a time in your career
- 6 where your primary teaching responsibilities
- 7 involved high school students?
- 8 A No.
- 9 Q Is the same true for junior high and
- 10 elementary school students?
- II A Right.
- Q Would it be correct to say that,
- 13 throughout your career, you've focused on teaching
- 14 at the college and graduate level? Is that
- 15 accurate?
- 16 A That's accurate.
- I7 Q And you're not really an expert on child
- 18 development?
- A No, I'm not.
- MR. JAPHA: Asked and answered.
- BY MR. ARAGON:
- Q Or teaching theories?

- I it to something like clay, because it is workable
- 2 like clay, but it's not quite the same as clay
- because it's granular. It's physically -- I mean,
- 4 it's visibly granular.
- 5 So this is one of the reasons why you can
- 6 make these shapes with very discrete, particular
- 7 locations, for example, the 60-ball
- 8 rhombicosidodecahedron.
- 9 Q What I want to ask, then, is, as a tool
- 10 compared to these other materials, are the magnet
- II spheres better, worse, the same as?
- A Well, I don't know, because I haven't used
- 13 them yet.
- Q Okay.
- If A I know that paper -- like when I use paper
- 16 to instruct students on making polyhedral shapes,
- it's sort of cumbersome, because using paper
- involves a lot of cutting and scoring and gluing,
- 19 and that's time-consuming.
- So an advantage that I see of using magnet
- spheres, at least for a small desk, is that you can
- 22 put together some nice shapes pretty quickly after