Trial Testimony of Michael Schmidt in *The Hillman Group, Inc. v. KeyMe, LLC,* 2:19-cv-209-JRG E.D. Tex.

- 05:33:12 1 THE COURT: All right. Mr. Freeman, you may step
- 05:33:16 2 down.
- 05:33:16 3 THE WITNESS: Thank you. Should I just leave this
- 05:33:27 4 material here?
- 05:33:28 5 THE COURT: Yes, just leave everything there,
- 05:33:32 6 please.
- 05:33:32 7 Plaintiff, call your next witness.
- 05:33:34 8 MR. IVEY: Yes, Your Honor, we call Mr. Michael
- 05:33:37 9 Schmidt to the stand.
- 05:33:38 10 THE COURT: All right. Mr. Schmidt, if you'll
- 05:33:42 11 come forward and be sworn. Mr. Schmidt, if you'll come
- 05:33:58 12 forward and be sworn, please.
- 05:34:07 13 (Witness sworn.)
- 05:34:08 14 THE COURT: Please come around, sir. Have a seat
- 05:34:15 15 on the witness stand. Once you get seated, if you'll
- 05:34:19 16 adjust the mic. If you want some water, pour a glass of
- 05:34:23 17 water, and then remove your mask.
- 05:34:27 18 MR. O'QUINN: May I approach with binders, Your
- 05:34:29 19 Honor?
- 05:34:29 20 THE COURT: You may pass out binders.
- 05:34:41 21 All right. Mr. Ivey, you may proceed with your
- 05:34:54 22 direct examination.
- 05:34:55 23 MR. IVEY: Thank you, Your Honor.
- 05:34:55 24 MICHAEL SCHMIDT, PLAINTIFF'S WITNESS, SWORN
- 05:34:55 25 DIRECT EXAMINATION

- 05:34:55 1 BY MR. IVEY:
- 05:34:55 2 Q. Good afternoon, Mr. Schmidt.
- 05:34:57 3 A. Good afternoon.
- 05:34:58 4 Q. Could you please introduce yourself to the ladies and
- 05:35:01 5 gentlemen of the jury, starting with your name?
- 05:35:02 6 A. Sure. I'm Michael Schmidt.
- 05:35:03 7 Q. And where do you reside?
- 05:35:05 8 A. In Gilbert, Arizona.
- 05:35:07 9 Q. Do you have family, sir?
- 05:35:08 10 A. I do.
- 05:35:09 11 Q. And could you tell us?
- 05:35:10 12 A. I have a wife and three kids, all teenagers.
- 05:35:17 13 MR. IVEY: Now, if we have Slide PPX-3.2. Thank
- 05:35:21 14 you.
- 05:35:21 15 Q. (By Mr. Ivey) Let's talk a little bit about your
- 05:35:24 16 education and your biography here. Where -- what degrees
- 05:35:29 17 do you hold, sir?
- 05:35:30 18 A. I have a mechanical engineering degree.
- 05:35:35 19 Q. And where did you get your engineering degree?
- 05:35:38 20 A. At the University of Arizona, Tucson.
- 05:35:40 21 Q. When did you take that degree?
- 05:35:42 22 A. I received that degree in 1995, I believe.
- 05:35:46 23 Q. And are you -- where -- who are you currently employed
- 05:35:49 24 by?
- 05:35:49 25 A. The Hillman Group.

- 05:35:50 1 Q. And where are you actually physically working?
- 05:35:54 2 A. Out of the Tempe, Arizona location.
- 05:35:57 3 Q. Do you work for a particular unit?
- 05:35:59 4 A. Yes, I work for the advanced technology department.
- 05:36:02 5 Q. And what is your title?
- 05:36:05 6 A. I'm the lead product development -- I'm sorry, product
- 05:36:13 7 development leader.
- 05:36:14 8 Q. Okay. And you mentioned advanced development. Can you
- 05:36:16 9 please tell us what that is?
- 05:36:17 10 A. Sure. So our team is tasked with identifying new
- 05:36:21 11 opportunities, identifying different technologies, creating
- 05:36:25 12 prototypes, kind of a very creative group. And so we
- 05:36:30 13 create different prototypes, I guess, for the different
- 05:36:34 14 businesses within Hillman.
- 05:36:36 15 Q. Mr. Schmidt, I'm going to ask you to try to slow down
- 05:36:40 16 just a little bit so the court reporter can keep up with
- 05:36:44 17 us.
- 05:36:44 18 A. Okay.
- 05:36:44 19 THE COURT: And he beat me to it because I was
- 05:36:48 20 just about to do the same thing.
- 05:36:50 21 THE WITNESS: Sorry, Your Honor.
- 05:36:51 22 THE COURT: Go ahead, counsel.
- 05:36:52 23 MR. IVEY: Thank you, Your Honor.
- 05:36:52 24 If we could have PPX-3.3, please.
- 05:36:55 25 Q. (By Mr. Ivey) Is this the advanced technology

- 05:36:57 1 department's headquarters?
- 05:36:58 2 A. Yes, that's the Tempe location.
- 05:37:00 3 Q. And could you tell us a little bit about that product,
- 05:37:04 4 the advanced development team? How many people are in the
- 05:37:07 5 team?
- 05:37:08 6 A. We are made up of a team of four engineers and
- 05:37:13 7 manufacturing or fabrication resources.
- 05:37:15 8 Q. And what specifically does the advanced technology team
- 05:37:19 9 do?
- 05:37:20 10 A. We make prototypes, and so it's very much a very
- 05:37:23 11 creative group. We're located where we have manufacturing
- 05:37:26 12 capabilities, kind of rapid prototyping, that sort of
- 05:37:29 13 thing.
- 05:37:31 14 THE COURT: Mr. Schmidt, pull the microphone a
- 05:37:32 15 little closer to you, please, sir.
- 05:37:34 16 THE WITNESS: Okay.
- 05:37:36 17 Q. (By Mr. Ivey) Who created the advanced development
- 05:37:38 18 team at Hillman?
- 05:37:40 19 A. It initially began with Byron Grice and myself were the
- 05:37:46 20 initial two that began in the department.
- 05:37:49 21 Q. Does the advanced development team simply work
- 05:37:53 22 in-house, or does it work with other companies or
- 05:37:56 23 consultants?
- 05:37:56 24 A. It depends on the project. We typically have many
- 05:38:00 25 projects going at the same time. Some of them are larger

- 05:38:03 1 and some of them are smaller, so depending on the needs or
- 05:38:06 2 the support that the team needs, we will identify resources
- 05:38:11 3 that might be small -- small individuals, businesses,
- 05:38:15 4 larger corporations, larger companies, depending on what
- 05:38:17 5 the needs are.
- 05:38:18 6 MR. IVEY: Let's take a look at PPX-3.4 for just a
- 05:38:24 7 moment. And this is pre-admitted as PTX-0052, Your Honor.
- 05:38:31 8 Q. (By Mr. Ivey) Can you tell us, Mr. Schmidt, what we're
- 05:38:34 9 looking at here?
- 05:38:35 10 A. Sure. That's basically one of the patent walls at the
- 05:38:40 11 engineering department at the Tempe location, Arizona.
- 05:38:44 12 Q. And if we were to walk down this hallway, would we see
- 05:38:47 13 any patents with your name on it?
- 05:38:49 14 A. Sure.
- 05:38:49 15 Q. How many?
- 05:38:49 16 A. Several. I'm not sure exactly.
- 05:38:53 17 Q. Now, can you tell us, sir, whether you are a patent
- 05:38:55 18 lawyer or a patent agent?
- 05:38:57 19 A. No, neither, definitely not.
- 05:38:59 20 Q. Do you involve yourself in the details of product -- in
- 05:39:06 21 patent prosecution?
- 05:39:07 22 A. No.
- 05:39:07 23 Q. You mentioned that you were an inventor on some of the
- 05:39:13 24 patents on the wall here in the department; is that
- 05:39:15 25 correct?

- 05:39:15 1 A. Correct.
- 05:39:16 2 MR. IVEY: Let's take a look at PPX-3.5.
- 05:39:20 3 Q. (By Mr. Ivey) You see on the screen here the '474
- 05:39:27 4 patent, sir?
- 05:39:27 5 A. Yes.
- 05:39:27 6 Q. And could you read in the title if that particular
- 05:39:33 7 patent?
- 05:39:33 8 A. Sure. It's Identification Module For Key Making
- 05:39:38 9 Machine.
- 05:39:38 10 Q. And who are the inventors on that patent?
- 05:39:40 11 A. They're the engineers who worked on that project.
- 05:39:43 12 Q. And you mentioned Byron Grice a moment ago as somebody
- 05:39:47 13 who was a co-developer of the advanced development team?
- 05:39:51 14 A. Correctly -- correct.
- 05:39:52 15 Q. And your name is the last one there?
- 05:39:54 16 A. Yes.
- 05:39:57 17 MR. IVEY: Let's have PPX-3.6, if we could. And
- 05:40:02 18 this is PTX-0954, pre-admitted, Your Honor.
- 05:40:08 19 Q. (By Mr. Ivey) And could you please tell the ladies and
- 05:40:10 20 gentlemen of the jury what the title of the '830 patent is
- 05:40:14 21 here?
- 05:40:14 22 A. Identification Module For Key Making Machine.
- 05:40:20 23 Q. Are the '474 and the '830 patents that we just reviewed
- 05:40:24 24 the same?
- 05:40:26 25 A. No.

- 05:40:26 1 Q. How are they related?
- 05:40:30 2 A. My understanding is that the claims of the '830 patent
- 05:40:37 3 goes into further detail and explores different things.
- 05:40:40 4 Q. Were you involved in developing and writing the
- 05:40:43 5 different claims for each of these patents?
- 05:40:45 6 A. No.
- 05:40:45 7 Q. Can you tell the ladies and gentlemen of the jury
- 05:40:56 8 briefly a little bit about the projects you were working on
- 05:40:58 9 that led to the '474 and the '830 patents?
- 05:41:01 10 A. Sure. So the task for this particular project was to
- 05:41:08 11 look at the existing technology and make a key machine that
- 05:41:14 12 was faster, more accurate, more user friendly, more
- 05:41:18 13 serviceable, that sort of thing, compared to the existing
- 05:41:22 14 technology. And so --
- 05:41:23 15 Q. All right, sir -- go ahead.
- 05:41:26 16 A. I'm sorry. And so because of that, many concepts were
- 05:41:31 17 developed, and some of those are what we're talking about
- 05:41:35 18 here today.
- 05:41:36 19 Q. Turning your attention to PPX-3.7. It's Figure 5 from
- 05:41:43 20 the '474 patent. Do you see that?
- 05:41:44 21 A. Yes.
- 05:41:47 22 Q. Could you walk us through some of the highlighted
- 05:41:49 23 features that are illustrated in Figure 5, please?
- 05:41:52 24 A. Sure. So this is an exploded view of a key make -- key
- 05:41:59 25 imaging machine, which is a component to the overall key

- 05:42:05 1 duplication machine.
- 05:42:07 2 Q. And could you provide some highlights with some of the
- 05:42:11 3 specifics of the capabilities that are illustrated very
- 05:42:15 4 generally here in Figure 5?
- 05:42:16 5 A. So as I mentioned, one of the purposes for the project
- 05:42:24 6 was to make the process faster for the end users. And so
- 05:42:30 7 what this concept was, was a way to duplicate a key by
- 05:42:37 8 getting a digital image without taking it off the key ring.
- 05:42:42 9 I could explain.
- 05:42:42 10 Q. Did that have a particular name at Hillman?
- 05:42:44 11 A. Yes, we called it key on a ring.
- 05:42:48 12 Q. And what was the reason -- what was the idea behind key
- 05:42:52 13 on a ring?
- 05:42:53 14 A. The reason for it was at the time, the existing
- 05:42:56 15 technology -- if I could, I guess -- the existing
- 05:42:59 16 technology, to create a digital image of a key, which is
- 05:43:04 17 desirable because it has a nice accuracy for the end
- 05:43:07 18 product. You had to take it off the key ring, so basically
- 05:43:11 19 a customer would have to enter the store, take their key
- 05:43:15 20 off their ring, which nobody enjoyed doing.
- 05:43:18 21 Once they took it off the ring, they would have to
- 05:43:20 22 open the door to the machine and place it on a piece of
- 05:43:25 23 glass. And they would line up the key with an arrow, and
- 05:43:28 24 close the door to the glass. And then they would have to
- 05:43:30 25 continue on with the -- the imaging copying process.

- 05:43:34 1 From there, they would get the key made. And
- 05:43:39 2 oftentimes they would go home and sometimes forget they had
- 05:43:43 3 left their key in the machine. So people would get
- 05:43:46 4 frustrated, have to come back to the store, retrieve their
- 05:43:49 5 key, of course.
- 05:43:50 6 And so one of the methods that we're trying to
- 05:43:54 7 figure out is that if we could get them to, one, not have
- 05:43:59 8 to take the key off the key ring, of course, breaking nails
- 05:44:04 9 and things like that, so if we could get them to do that.
- 05:44:08 10 But also if we could expedite the process, again, make it
- 05:44:11 11 more user friendly.
- 05:44:12 12 So instead of taking a minute or two minutes to
- 05:44:15 13 deal with this process, it could be kind of cool if they
- 05:44:17 14 could just insert the key and within five to 10 seconds
- 05:44:20 15 that whole process is done.
- 05:44:21 16 They don't leave the key at the store. They don't
- 05:44:23 17 have to take it off the key ring. They don't have to give
- 05:44:27 18 the key to the associate. And so that's where the key on
- 05:44:30 19 the ring concept was -- had begun --
- 05:44:33 20 Q. Okay.
- 05:44:33 21 A. -- at the time.
- 05:44:38 22 Q. Looking at 114 here on the front of Figure 5 here, do
- 05:44:42 23 you see that?
- 05:44:42 24 A. Yes.
- 05:44:43 25 Q. And it's now been put in teal or green. Can you please

- 05:44:47 1 describe what the functionality is of that particular item?
- 05:44:49 2 A. So that is, I guess, what we call the slot for this key
- 05:44:54 3 imaging machine. Basically, you insert the key, everything
- 05:44:58 4 except for the head of the key, so --
- 05:45:01 5 THE COURT: Slow down, Mr. Schmidt, please.
- 05:45:03 6 THE WITNESS: I'm sorry. Okay.
- 05:45:06 7 A. So you can insert the key while still leaving the key
- 05:45:13 8 on the key ring. And that was the goal. So that's where
- 05:45:19 9 you would insert the key.
- 05:45:20 10 Q. (By Mr. Ivey) And this is part of what you referred to
- 05:45:22 11 as making the experience more user friendly?
- 05:45:25 12 A. Exactly.
- 05:45:27 13 Q. Now, what about the item that's labeled here 126? Do
- 05:45:32 14 you see that?
- 05:45:32 15 A. Yes.
- 05:45:33 16 Q. Could you please give the ladies and gentlemen of the
- 05:45:36 17 jury an idea of what is shown in 126 here?
- 05:45:39 18 A. Sure. So that's the camera that's used for the system.
- 05:45:45 19 The large challenge for this whole effort was to be able to
- 05:45:49 20 accomplish this by just inserting the key without the key
- 05:45:54 21 head and be able to deal with two to 300 different keys.
- 05:45:57 22 And so to get that digital image, we would use this camera.
- 05:46:01 23 And the orange at 128 is the backlight.
- 05:46:05 24 So there's two critical things to be able to copy
- 05:46:08 25 the key. The first one is the bitting pattern or the

- 05:46:15 1 teeth, as I guess we'd call it, of the key.
- 05:46:19 2 The other thing is the grooves along the length of
- 05:46:22 3 the key is important to identify the length that it's
- 05:46:24 4 using.
- 05:46:24 5 And so the key that's used with the backlight is
- 05:46:28 6 used so that when the backlight turns on, it creates
- 05:46:31 7 basically a shadow of a key and -- or an outline that
- 05:46:35 8 creates contrast to the backlight. And that will give you
- 05:46:39 9 your teeth profile, which is one of the two required
- 05:46:43 10 components that's needed.
- 05:46:45 11 Q. And by one of the two required components, what are you
- 05:46:49 12 referring to?
- 05:46:50 13 A. Being able to take the image of the tooth pattern. The
- 05:46:56 14 second was the milling pattern of the key.
- 05:47:00 15 Q. The milling pattern would be the grooves?
- 05:47:02 16 A. The grooves, yes. The grooves, I'm sorry.
- 05:47:05 17 Q. Turning your attention to Item 131, can you please tell
- 05:47:09 18 us what we're seeing here?
- 05:47:10 19 A. Sure. That's the laser, basically. It projects a
- 05:47:16 20 stripe onto the surface of the key blank. And so the
- 05:47:21 21 camera will take a picture of that and will -- so that it
- 05:47:23 22 can specify the group dimensions of the key blank.
- 05:47:28 23 Q. And Item 124, do you see that, sir, now in kind of a
- 05:47:36 24 bluish turquoise color there?
- 05:47:43 25 A. Yes.

- 05:47:44 1 Q. Could you please explain what that is?
- 05:47:45 2 A. So in trying to -- or developing a system to work with
- 05:47:48 3 two to 300 different keys, obviously there will be a lot of
- 05:47:52 4 automotive keys in there. And so -- many automotive keys
- 05:47:55 5 are what are called transponder keys. And to -- when a
- 05:47:59 6 person inserts their key into the slot, this is a -- this
- 05:48:03 7 sensor detects the signal for the transponder key so that
- 05:48:06 8 it can tell the consumer if they have a transponder key or
- 05:48:09 9 not.
- 05:48:11 10 Q. All right. And, finally, let's take a look at 108.
- 05:48:28 11 Could you please tell us what we have shown there?
- 05:48:30 12 A. Sure.
- 05:48:30 13 THE COURT: Let me do this. This is probably not
- 05:48:32 14 a perfect time. It's been a long day, but we're going to
- 05:48:35 15 recess for the day at this point, and we'll pick up with
- 05:48:37 16 Mr. Schmidt's testimony first thing in the morning, ladies
- 05:48:42 17 and gentlemen. We've just started with his direct, and
- 05:48:44 18 then there's cross-examination, and I'm not going to keep
- 05:48:46 19 you long enough today to finish all that.
- 05:48:49 20 So if you will, when you leave the courtroom in a
- 05:48:54 21 minute, if you'll take your notebooks with you and leave
- 05:48:56 22 them closed on the table in the jury room.
- 05:48:59 23 Also, if you will recall all the instructions I've
- 05:49:01 24 given you. Again, unless you live alone, when you walk
- 05:49:06 25 through the door, somebody is going to ask you what

- 05:49:10 1 happened in court today in Marshall. Don't try to answer
- 05:49:12 2 that question. Blame it on me. And don't discuss or
- 05:49:15 3 communicate about the case in any way with anyone.
- 05:49:19 4 Follow all the instructions I've given you
- 05:49:21 5 otherwise about your conduct. Travel safely. Try to be
- 05:49:24 6 back and assembled by about 8:15 or 8:20 in the morning,
- 05:49:28 7 because we're going to do our best to start at 8:30.
- 05:49:30 8 And with that, ladies and gentlemen, have a good
- 05:49:32 9 evening. You're excused for the evening.
- 05:49:34 10 COURT SECURITY OFFICER: All rise.
- 05:49:49 11 (Jury out.)
- 05:49:51 12 THE COURT: Be seated, please.
- 05:50:05 13 You can step down, Mr. Schmidt. You can step
- 05:50:11 14 down.
- 05:50:11 15 THE WITNESS: Oh, step down. I'm sorry.
- 05:50:12 16 THE COURT: Mr. Ivey, I have some concerns about
- 05:50:22 17 where this is headed. So far, we haven't seen any claim
- 05:50:25 18 language. We're seeing specifications, and we're hearing
- 05:50:29 19 about Hillman products and Hillman engineers, talking about
- 05:50:33 20 what is required and what isn't required.
- 05:50:37 21 Tell me why I shouldn't be concerned that we are
- 05:50:40 22 straying from the comparison of the KeyMe accused product
- 05:50:44 23 to the asserted claim language.
- 05:50:48 24 Yes, sir, please go to the podium. Maybe I
- 05:50:51 25 shouldn't be concerned. I didn't see the Defendants

- 07:59:24 1 PROCEEDING
- 07:59:24 2 (Jury out.)
- 07:59:26 3 COURT SECURITY OFFICER: All rise.
- 07:59:26 4 THE COURT: Be seated, please.
- 08:28:28 5 Are the parties prepared to read into the record
- 08:28:34 6 those items from the list of pre-admitted exhibits used
- 08:28:37 7 during yesterday's portion of the trial? If so, please go
- 08:28:42 8 to the podium and proceed.
- 08:28:44 9 MS. REGAN: Good morning, Your Honor. I'm Cara
- 08:28:47 10 Regan on behalf of The Hillman Group, and I have Plaintiff
- 08:28:50 11 exhibits today. Read into the record yesterday were
- 08:28:54 12 PTX-0001, PTX-0002, PTX-0003, PTX-0052, PTX-0954, PTX-0955,
- 08:29:13 13 PTX-0956, and DX-0074.
- 08:29:19 14 THE COURT: All right. Any objection to that
- 08:29:21 15 rendition from the Defendant?
- 08:29:23 16 MR. DACUS: We have no objection, Your Honor.
- 08:29:25 17 And in addition, we did not admit any additional
- 08:29:28 18 exhibits yesterday, so that's the entirety of the list for
- 08:29:30 19 the first day of trial.
- 08:29:31 20 THE COURT: Good. Thank you, counsel.
- 08:29:33 21 MR. DACUS: Thank you.
- 08:29:34 22 THE COURT: Mr. Schmidt, are you ready to return
- 08:29:36 23 to the jury box? Please come forward and have a seat in
- 08:29:40 24 the jury box.
- 08:29:40 25 I remind you, sir, you remain under oath.

- 08:29:44 1 And while he's getting situated, if you'd bring in
- 08:29:47 2 the jury, please, Mr. Mixon.
- 08:29:49 3 COURT SECURITY OFFICER: All rise.
- 08:30:08 4 (Jury in.)
- 08:30:10 5 THE COURT: Good morning, ladies and gentlemen.
- 08:30:19 6 Welcome back. Please have a seat.
- 08:30:21 7 We'll continue where we left off yesterday with
- 08:30:26 8 Mr. Michael Schmidt on the witness stand.
- 08:30:31 9 Mr. Ivey, you may continue with your direct
- 08:30:32 10 examination.
- 08:30:33 11 MR. IVEY: Thank you, Your Honor.
 - 12 Could we pull up PPX-3.7 again (sic)?
 - 13 MICHAEL SCHMIDT, PLAINTIFF'S WITNESS,
 - 14 PREVIOUSLY SWORN
 - DIRECT EXAMINATION (CONTINUED)
 - 16 BY MR. IVEY:
- 08:30:44 17 Q. Now, finishing up with where we were yesterday, what
- 08:30:47 18 type of key making machine were your inventions intended
- 08:30:52 19 for?
- 08:30:52 20 A. Our -- these were intended for both associated,
- 08:31:02 21 operated, and kiosk-type machines. Our department builds
- 08:31:07 22 core technology and so -- core being central to the
- 08:31:11 23 machine, various machines. And so they're designed in a
- 08:31:15 24 very modular fashion so that they can be used in many
- 08:31:18 25 different Hillman machines and updated when needed.

- 08:31:21 1 Q. What type of rendition do we see with Figure 5 with
- 08:31:24 2 regard to that type of machine that could be either used by
- 08:31:28 3 an associate or self-service?
- 08:31:29 4 A. This is a modular unit for a key imaging module.
- 08:31:35 5 Q. Would it be a free-standing or would it sit on a
- 08:31:38 6 tabletop? How would it be deployed?
- 08:31:40 7 A. This configuration -- at the time, this was a very
- 08:31:43 8 early version. It was for a tabletop, a highly compact
- 08:31:47 9 tabletop version used for associates or as a kiosk.
- 08:31:51 10 THE COURT: Let me stop just a minute.
- 08:31:52 11 Mr. Schmidt, I want us to get off to a good start
- 08:31:54 12 this morning. Either speak up a little bit or pull the
- 08:31:57 13 microphone a little closer and try to slow down. I want to
- 08:32:02 14 make sure the jury hears and follows your testimony, and it
- 08:32:05 15 seems still to be a little bit too fast. So if you'll
- 08:32:08 16 speak up and slow down, I'll be happier, and hopefully the
- 08:32:11 17 process will work better.
- 08:32:13 18 THE WITNESS: Okay.
- 08:32:13 19 THE COURT: Thank you. That's great.
- 08:32:15 20 Go ahead, counsel.
- 08:32:16 21 Q. (By Mr. Ivey) Did you face any challenges in
- 08:32:18 22 developing your invention that you could tell us about very
- 08:32:21 23 briefly?
- 08:32:22 24 A. Sure. The difficulties with this type of solution
- 08:32:28 25 really comes with the complexity of the keys and the amount

- 08:32:32 1 of keys. This was designed for about two -- 200 to 300
- 08:32:38 2 different type of keys, and so difficulty becomes creating
- 08:32:42 3 a slot physically -- the physical features become difficult
- 08:32:47 4 in creating the slot that is designed appropriately so that
- 08:32:51 5 allows the large keys to be inserted further -- far enough
- 08:32:55 6 to see the features, but yet still have the appropriate
- 08:32:57 7 features so the small keys won't fall through or go too far
- 08:33:02 8 into the machine.
- 08:33:03 9 So that was the complexity in designing some of
- 08:33:07 10 the components around that.
- 08:33:08 11 The other thing that was different was prior to
- 08:33:12 12 that, as I mentioned earlier, the technology was to put the
- 08:33:17 13 entire key blank into the unit on a piece of glass where
- 08:33:21 14 you can see the entire head of the unit, the entire
- 08:33:25 15 features of the key blank. That's when you take a picture
- 08:33:27 16 of it. It's easier to identify what blank it is.
- 08:33:30 17 In this configuration, just the shank or the head
- 08:33:35 18 or -- I'm sorry, just the shank of the key -- everything
- 08:33:39 19 but the head -- may go into the machine, so now you're
- 08:33:42 20 trying to identify the key blank just by what's sticking
- 08:33:46 21 into the machine. So for the software engineers and team,
- 08:33:50 22 that was very difficult, again, to deal with 200 or 300
- 08:33:53 23 different types of key blanks.
- 08:33:54 24 Q. With your prototype, what was the goal that you'd set
- 08:33:59 25 in terms of identifying approximately this two or 300 types

- 08:34:04 1 of keys? Was that the goal you had for the prototype that
- 08:34:07 2 you developed?
- 08:34:08 3 A. Yes. That was the original target from the onset of
- 08:34:12 4 the project was to encompass all those keys.
- 08:34:15 5 Q. And with your project, were you able to meet or exceed
- 08:34:18 6 that goal?
- 08:34:18 7 A. Yes.
- 08:34:19 8 Q. And which was it? Were you able to meet or exceed it?
- 08:34:23 9 A. Exceed, I would say.
- 08:34:25 10 Q. Approximately by how much?
- 08:34:26 11 A. I can't give you an accurate answer to that because
- 08:34:34 12 it's continually being added to every day. At the time, we
- 08:34:39 13 had -- we had broken the keys into phases. We kind of had
- 08:34:45 14 Phase 1, Phase 2, Phase 3 based on priority, and each phase
- 08:34:50 15 had roughly 100 keys or so. And so by the time we were
- 08:34:54 16 done, we got in the two and 300 range, and now they're
- 08:34:58 17 still adding to it. And this was eight years ago.
- 08:34:59 18 Q. Understood.
- 08:35:01 19 MR. IVEY: Now, if we could have PPX-3.8, please.
- 08:35:04 20 Q. (By Mr. Ivey) And, Mr. Schmidt, if you could, please
- 08:35:08 21 focus our attention on where and when your inventions are
- 08:35:13 22 shown on the timeline here.
- 08:35:15 23 A. 2013.
- 08:35:18 24 Q. And that's for the '474 patent?
- 08:35:22 25 A. That's correct.

- 08:35:22 1 Q. And also for the '830 patent?
- 08:35:24 2 A. Yes.
- 08:35:25 3 MR. IVEY: Your Honor. Thank you. Pass the
- 08:35:27 4 witness.
- 08:35:27 5 THE COURT: All right.
- 08:35:29 6 MR. IVEY: Thank you, sir.
- 08:35:30 7 THE COURT: Is there cross-examination by the
- 08:35:31 8 Defendant?
- 08:35:36 9 MR. DACUS: Your Honor, may we approach with the
- 08:35:38 10 binders?
- 08:35:39 11 THE COURT: You may approach.
- 08:35:40 12 MR. DACUS: Thank you.
- 08:35:56 13 THE COURT: Mr. Pak, you may proceed with
- 08:35:59 14 cross-examination when you're ready.
- 08:36:00 15 MR. PAK: Thank you, Your Honor.
- 08:36:00 16 CROSS-EXAMINATION
- 08:36:00 17 BY MR. PAK:
- 08:36:00 18 Q. Good morning, Mr. Schmidt.
- 08:36:02 19 A. Good morning.
- 08:36:03 20 Q. You just testified about your '474 patent; is that
- 08:36:06 21 correct?
- 08:36:06 22 A. Yes.
- 08:36:09 23 MR. PAK: And, Mr. Jay, if we can have the '474
- 08:36:13 24 patent shown on the screen.
- 08:36:14 25 Q. (By Mr. Pak) Now, Mr. Schmidt, just to be clear, the

- 08:36:18 1 provisional date of this patent, if we turn to the next
- 08:36:23 2 page, is August 16th, 2013; is that correct?
- 08:36:32 3 A. Yes.
- 08:36:34 4 Q. And were you aware of what KeyMe was doing at the time
- 08:36:38 5 in August of 2013?
- 08:36:39 6 A. To the best of my knowledge, no.
- 08:36:46 7 Q. Were you aware of other kiosks that existed in August
- 08:36:49 8 of 2013?
- 08:36:50 9 A. No.
- 08:36:54 10 MR. PAK: And let's go to the front page of this
- 08:36:57 11 document.
- 08:36:58 12 Q. (By Mr. Pak) That's a picture of a key. And then I
- 08:37:00 13 think you showed a picture of the machine.
- 08:37:03 14 MR. PAK: And so if you could, Mr. Jay, turn to
- 08:37:06 15 the next figures in the patent. Just keep scrolling
- 08:37:15 16 through. Stop there. Okay.
- 08:37:18 17 Q. (By Mr. Pak) So Figure 4, sir, is a picture of the
- 08:37:23 18 unit that you had built, which was the basis of the '474
- 08:37:26 19 patent; is that correct?
- 08:37:27 20 A. Yes.
- 08:37:28 21 Q. And this was a machine from Hillman, correct? This is
- 08:37:33 22 not a Minute Key machine?
- 08:37:34 23 A. Yes.
- 08:37:35 24 Q. And this machine could be used by either an associate
- 08:37:39 25 or a consumer; is that your testimony?

- 08:37:41 1 A. This was an early version, the very first prototype.
- 08:37:47 2 Once we completed the revisions to it, that version, right,
- 08:37:51 3 was intended for -- it could be used for both.
- 08:37:54 4 Q. So the same machine could be used either by a consumer
- 08:37:58 5 walking up to the unit or an associate who's been trained
- 08:38:02 6 to use it; is that correct?
- 08:38:03 7 A. Yes.
- 08:38:03 8 Q. And would the operation be the same for the user as
- 08:38:07 9 well as the associate, or would the operation be different?
- 08:38:10 10 A. You mean for -- user, you mean customer?
- 08:38:14 11 Q. Yes.
- 08:38:15 12 A. The machine would have a different configuration,
- 08:38:18 13 mostly in the software, to accommodate both.
- 08:38:26 14 Q. But in software, you would allow the same machine to be
- 08:38:29 15 used by either a consumer or an associate; is that correct?
- 08:38:31 16 A. Yes.
- 08:38:31 17 Q. Now, you talk about this being a prototype, so if I
- 08:38:35 18 look at Figure 4, the prototype, was that, at that time of
- 08:38:39 19 the patent, designed to be used by both a consumer as well
- 08:38:44 20 as an associate?
- 08:38:44 21 A. Yes.
- 08:38:46 22 Q. Okay. So what we're seeing in the figures of this
- 08:38:50 23 patent could also be used by either a consumer or an
- 08:38:53 24 associate who works at the store; is that correct?
- 08:38:59 25 A. Yes.

- 08:38:59 1 Q. Do you see any technical difficulties in having the
- 08:39:03 2 same unit be used by both consumers as well as associates?
- 08:39:07 3 A. Certainly. That had challenges as well.
- 08:39:13 4 Q. But you saw those challenges in making this unit that's
- 08:39:17 5 shown in Figure 4; is that correct?
- 08:39:19 6 A. Like I mentioned, this is an early version of it to
- 08:39:25 7 review concepts. The version that it's turned into was
- 08:39:30 8 refined to address those issues.
- 08:39:32 9 Q. Okay. But just to be clear, the beta work that you did
- 08:39:37 10 to solve those problems that you talked about was not
- 08:39:41 11 disclosed in this patent which was filed based on the
- 08:39:44 12 prototype; is that right?
- 08:39:45 13 A. I don't know the answer to that.
- 08:39:47 14 Q. Well, you do know the work that you did to support both
- 08:39:50 15 consumers and associates came after this prototype was
- 08:39:54 16 built; is that correct?
- 08:39:54 17 A. Well, this -- specifically, the unit on the left, the
- 08:40:03 18 second part, we call it the customer station for that,
- 08:40:08 19 typically what happens is our department will identify
- 08:40:14 20 opportunities and new concepts and create prototypes. Once
- 08:40:17 21 we create those prototypes and include those features,
- 08:40:21 22 we'll hand it off to the legal group within Hillman, and
- 08:40:25 23 they will address those different features and things
- 08:40:29 24 within the unit.
- 08:40:30 25 Q. You're the inventor on this patent; is that right?

- 08:40:34 1 A. Among others on the team, yes.
- 08:40:37 2 Q. And I understand that you've read the patent before you
- 08:40:39 3 testified here today?
- 08:40:39 4 A. Yes.
- 08:40:40 5 Q. And you read the description in the patent, as well as
- 08:40:43 6 the claim language of the patent; is that right?
- 08:40:44 7 A. Yes.
- 08:40:46 8 Q. And you understand the claim language of this patent;
- 08:40:50 9 is that right?
- 08:40:50 10 A. As much as I could. I'm not an attorney, I'm not a
- 08:40:54 11 patent attorney, or I'm not trained in writing patents or
- 08:40:58 12 claims, but I did read through it, yes.
- 08:41:00 13 Q. So let's take a look at the claim language.
- 08:41:03 14 MR. PAK: If we go to Claim 1, Mr. Jay.
- 08:41:06 15 Q. (By Mr. Pak) Do you see that this claim describes a
- 08:41:16 16 key making machine that has the following elements? Do you
- 08:41:19 17 see that?
- 08:41:20 18 A. Yes.
- 08:41:20 19 Q. It includes a housing?
- 08:41:21 20 A. Yes.
- 08:41:23 21 Q. It includes an identification system?
- 08:41:27 22 A. Yes.
- 08:41:28 23 Q. It also includes a slot opening?
- 08:41:32 24 A. Yes.
- 08:41:32 25 Q. And a transponder sensor?

- 08:41:35 1 A. Yes.
- 08:41:36 2 Q. An imaging system?
- 08:41:39 3 A. Yes.
- 08:41:40 4 Q. A fabrication system?
- 08:41:43 5 A. Yes.
- 08:41:43 6 Q. And a user interface; is that correct?
- 08:41:45 7 A. Correct.
- 08:41:48 8 MR. PAK: And if we turn to Claim 7, if we can put
- 08:41:52 9 that on the bottom there.
- 08:41:53 10 Q. (By Mr. Pak) You understand this is a dependent claim,
- 08:41:59 11 which means that it includes all the elements of Claim 1
- 08:42:02 12 but then adds one more element; you understand that?
- 08:42:07 13 A. Yes.
- 08:42:08 14 Q. Okay. And this Claim 7, which depends from Claim 1,
- 08:42:12 15 adds a touchscreen as the user interface; is that correct?
- 08:42:23 16 A. Yes.
- 08:42:24 17 THE COURT: Mr. Schmidt, you're going to have to
- 08:42:27 18 speak up. I can barely hear you, and I'm five feet away
- 08:42:32 19 from you.
- 08:42:32 20 THE WITNESS: Okay. I'm sorry.
- 08:42:34 21 THE COURT: Go ahead, counsel.
- 08:42:35 22 MR. PAK: Thank you, Your Honor.
- 08:42:36 23 Q. (By Mr. Pak) Was that a yes?
- 08:42:38 24 A. Yes.
- 08:42:38 25 Q. That this user interface is a touchscreen?

- 08:42:41 1 A. Yes.
- 08:42:42 2 Q. And do you understand, sir, that the only claim that's
- 08:42:44 3 being asserted in this case from your '474 patent is Claim
- 08:42:47 4 7?
- 08:42:47 5 A. I don't understand the details of -- of what's being
- 08:42:54 6 asserted in this. I just -- I'm not sure the details of
- 08:42:59 7 how all the claims are related to what's really trying to
- 08:43:03 8 happen.
- 08:43:03 9 Q. Your attorneys didn't tell you that Claim 7 is what's
- 08:43:08 10 being asserted in this case?
- 08:43:08 11 A. We didn't review --
- 08:43:10 12 MR. IVEY: Objection, Your Honor.
- 08:43:11 13 THE COURT: State your objection.
- 08:43:11 14 MR. IVEY: No foundation for that.
- 08:43:17 15 MR. PAK: I'll withdraw the question, Your Honor.
- 08:43:19 16 THE COURT: All right. Restate the question or
- 08:43:21 17 ask another one.
- 08:43:22 18 MR. PAK: Thank you.
- 08:43:22 19 Q. (By Mr. Pak) Mr. Schmidt, I'll represent to you that
- 08:43:24 20 Claim 7 is the only claim that's being asserted in this
- 08:43:24 21 case. Do you understand that?
- 08:43:32 22 A. Okay.
- 08:43:32 23 Q. So to have Claim 7 be used by a machine, we went
- 08:43:37 24 through all the different elements; you understand that,
- 08:43:39 25 correct?

- 08:43:39 1 A. Yes.
- 08:43:39 2 Q. And you understand that, as an inventor, if one of
- 08:43:44 3 these elements is missing, then Claim 7 is not being used;
- 08:43:49 4 is that correct?
- 08:43:49 5 MR. IVEY: Objection again, Your Honor.
- 08:43:51 6 THE COURT: Overruled.
- 08:43:55 7 A. Can you rephrase -- or repeat the question? I'm sorry.
- 08:44:00 8 Q. (By Mr. Pak) Sure. You understand that, as the
- 08:44:02 9 inventor of this '474 patent, in order to use Claim 7, you
- 08:44:05 10 have to have all the elements of the claim, and if any one
- 08:44:09 11 of the elements is missing, you're not using Claim 7; you
- 08:44:16 12 understand that?
- 08:44:16 13 A. Yes.
- 08:44:20 14 MR. PAK: Now, if we go to --
- 08:44:22 15 Q. (By Mr. Pak) And by the way, you authorized your
- 08:44:26 16 attorneys, by signing a declaration, to prepare this
- 08:44:31 17 application that led to the '474 patent, correct?
- 08:44:32 18 A. Yes.
- 08:44:33 19 Q. Okay. Do you remember signing something that said: I
- 08:44:36 20 review the patent, I understand the claims, I understand
- 08:44:39 21 the specification, I authorize the attorneys to prepare
- 08:44:42 22 this application for me? Do you remember doing that?
- 08:44:45 23 A. What I recall is -- as I mentioned, you know, we'll
- 08:44:50 24 prepare the product, the concepts, we'll deliver it to
- 08:44:53 25 them, they will create the documentation that protects

- 08:44:55 1 those features and things like that, and then we'll get a
- 08:44:58 2 copy that says: Can you prove that these are the features?
- 08:45:02 3 And so that's what I recall is reviewing that.
- 08:45:05 4 Q. Right. And you recall reviewing the document and
- 08:45:07 5 confirming that everything was accurate before you signed
- 08:45:09 6 it, correct?
- 08:45:10 7 A. As much as I could.
- 08:45:13 8 Q. Okay. You wouldn't have signed that declaration and
- 08:45:16 9 put your name on a patent that you thought was inaccurate,
- 08:45:19 10 correct?
- 08:45:19 11 A. It certainly would not be my intent, but, again, I'm
- 08:45:25 12 not a patent attorney, so I certainly couldn't double-check
- 08:45:29 13 the patent law resources within Hillman --
- 08:45:31 14 Q. Okay.
- 08:45:32 15 A. -- on the verbiage of the patent.
- 08:45:36 16 Q. So as far as you know, sitting here today, are you
- 08:45:39 17 aware of any inaccurate statements in your patent, the '474
- 08:45:43 18 patent?
- 08:45:43 19 A. Not that I'm aware of.
- 08:45:44 20 THE COURT: Mr. Pak, you're trailing off at the
- 08:45:46 21 end of your questions.
- 08:45:47 22 MR. PAK: Sorry, Your Honor. I'll try to pick it
- 08:45:49 23 up.
- 08:45:49 24 THE COURT: Pull the microphone closer.
- 08:45:51 25 MR. PAK: Thank you.

- 08:45:53 1 Q. (By Mr. Pak) Mr. Schmidt, can you hear me now?
- 08:45:55 2 A. Yes.
- 08:45:58 3 Q. Okay.
- 08:45:59 4 MR. PAK: So now let's go to Column 1 of this
- 08:46:01 5 patent, the '474 patent.
- 08:46:02 6 Q. (By Mr. Pak) So one of the things that we see in this
- 08:46:15 7 patent is a description of the background. Do you see
- 08:46:17 8 that?
- 08:46:17 9 A. Yes.
- 08:46:18 10 Q. Okay. And do you see here that this is a description
- 08:46:22 11 in your patent of what existed in the key duplication field
- 08:46:27 12 before you filed your patent application; is that correct?
- 08:46:30 13 A. Yes.
- 08:46:31 14 Q. Okay. And if you look at Column 1, Line 39, there's a
- 08:46:38 15 reference to, quote, an exemplary automated key duplication
- 08:46:44 16 machine is disclosed in U.S. Patent Application Publication
- 08:46:51 17 2102/0243957 to Drake that published on September 27th,
- 08:46:58 18 2012. Do you see that?
- 08:46:59 19 A. Yes.
- 08:47:00 20 Q. So you understand, sir, that before you filed your
- 08:47:08 21 application, there was another patent application filed
- 08:47:11 22 with the Unites States Patent Office by a gentlemen named
- 08:47:13 23 Drake; you understand that?
- 08:47:14 24 MR. IVEY: Objection, Your Honor.
- 08:47:15 25 THE COURT: I'm sorry?

- 08:47:16 1 MR. IVEY: Objection, Your Honor.
- 08:47:16 2 THE COURT: State your objection, counsel.
- 08:47:18 3 MR. IVEY: No foundation. Beyond the scope of the
- 08:47:21 4 testimony of this witness.
- 08:47:22 5 THE COURT: Pull your mask down, Mr. Ivey. I
- 08:47:24 6 can't hear you from there.
- 08:47:25 7 MR. IVEY: I apologize, Your Honor. We object.
- 08:47:27 8 No foundation. It's beyond the scope of this witness.
- 08:47:30 9 THE COURT: I'll allow the question. Your
- 08:47:36 10 objection is overruled.
- 08:47:38 11 MR. PAK: Thank you, Your Honor.
- 08:47:39 12 THE COURT: Let's proceed.
- 08:47:39 13 Q. (By Mr. Pak) Mr. Schmidt, do you see that this was a
- 08:47:43 14 patent application filed with the United States Patent
- 08:47:45 15 Office before yours, and it was filed by a gentleman named
- 08:47:49 16 Mr. Drake? Do you understand that?
- 08:47:51 17 A. Yes.
- 08:47:55 18 MR. PAK: And so let's pull up -- I believe this
- 08:47:57 19 is DX-85, Mr. Jay.
- 08:48:00 20 Q. (By Mr. Pak) Mr. Schmidt, do you see that this is the
- 08:48:08 21 Drake patent application that was filed with the United
- 08:48:11 22 States Patent Office by Mr. Drake and others, titled Key
- 08:48:19 23 Duplication Machine?
- 08:48:20 24 A. Yes.
- 08:48:20 25 Q. And in addition to Mr. Drake, do you see a gentleman

- 08:48:25 1 named William Mutch, M-u-t-c-h?
- 08:48:27 2 A. Yes.
- 08:48:28 3 Q. Okay. And if you go to the right, do you see that
- 08:48:30 4 there is a provisional application date?
- 08:48:33 5 A. Yes.
- 08:48:39 6 Q. And this application was filed on January 23rd, 2006,
- 08:48:46 7 by Mr. Drake, correct?
- 08:48:48 8 A. Yes.
- 08:48:51 9 MR. PAK: And if you scroll down, Mr. Jay, in this
- 08:48:54 10 document, on the front page.
- 08:48:55 11 Q. (By Mr. Pak) Do you see that it depicts a key
- 08:48:59 12 duplication machine?
- 08:49:02 13 A. Yes.
- 08:49:03 14 Q. Now, I want to go back to the things that you said in
- 08:49:07 15 your patent application about this 2006 Drake patent.
- 08:49:13 16 MR. PAK: So if you go back to the '474 patent,
- 08:49:16 17 Mr. Jay, and Column 1 again, please. Thank you.
- 08:49:38 18 Q. (By Mr. Pak) So one of the first things you said about
- 08:49:40 19 the Drake patent, starting at Column 42 -- Line 1,
- 08:49:47 20 Column -- Column 1, Line 42 is, quote, in particular, the
- 08:49:54 21 '957 publication -- which is the Drake patent that we just
- 08:49:58 22 saw -- discloses a key duplication machine having a key
- 08:50:02 23 blank identification system and a key fabrication system
- 08:50:06 24 incorporated into a single apparatus.
- 08:50:09 25 Do you see that?

- 08:50:10 1 A. Yes.
- 08:50:11 2 Q. So you'd agree with me that the '474 patent, your
- 08:50:18 3 patent, did not invent the concept of an automated key
- 08:50:24 4 duplication machine, correct?
- 08:50:28 5 A. Correct. And Hillman has had a previous version for
- 08:50:33 6 quite some time before that, as well, so those were
- 08:50:36 7 previous units available, yes.
- 08:50:37 8 Q. Okay. It also goes on to say, the next line: The key
- 08:50:44 9 blank identification system of Drake uses an optical
- 08:50:48 10 imaging device to capture a silhouette of an inserted
- 08:50:54 11 master key when backlighting is turned on.
- 08:50:58 12 Do you see that, sir?
- 08:50:59 13 A. Yes.
- 08:51:00 14 Q. So, again, your '474 patent did not invent the concept
- 08:51:05 15 of using an optical imaging device to capture a key's tooth
- 08:51:18 16 pattern, correct?
- 08:51:18 17 A. Yes.
- 08:51:18 18 Q. And we saw that the Drake patent application was filed
- 08:51:24 19 in 2006, January, correct?
- 08:51:25 20 A. Correct.
- 08:51:30 21 Q. And then your patent goes on to say in that same
- 08:51:34 22 column, Line 48: The silhouette is measured to determine a
- 08:51:39 23 depth, angle, and position of each tooth in the master key
- 08:51:45 24 and to determine if the master key includes a pattern on
- 08:51:49 25 one side or on both sides.

- 08:51:52 1 Do you see that, sir?
- 08:51:53 2 A. Yes.
- 08:51:53 3 Q. So, again, that's talking about the tooth pattern of an
- 08:51:59 4 inserted key, correct?
- 08:52:00 5 A. Correct.
- 08:52:00 6 Q. And so -- so the '474 patent, your patent, did not
- 08:52:06 7 invent the concept of using imaging to capture the depth,
- 08:52:11 8 angle, and position of each tooth in an inserted master
- 08:52:16 9 key, correct?
- 08:52:18 10 A. That's correct. Hillman has been using the cameras and
- 08:52:22 11 the lasers and the backlighting for 10 to 15 years now in
- 08:52:28 12 other machines.
- 08:52:28 13 Q. 15 years, did you say?
- 08:52:30 14 A. The P4 is maybe -- I'm not certain of the date exactly,
- 08:52:34 15 but it was maybe 10 years for sure. I don't know the exact
- 08:52:37 16 date, but it was prior to my being at Hillman.
- 08:52:41 17 Q. Thank you. So just to be clear, 10, 15 years ago
- 08:52:46 18 before you even filed this application, Hillman itself was
- 08:52:48 19 using optical technologies; is that right?
- 08:52:50 20 A. Yes. With the key off the ring, yes.
- 08:52:53 21 Q. Are you aware of the details of any of the Minute Key
- 08:52:56 22 patents in this case?
- 08:52:57 23 A. No, I haven't studied those.
- 08:52:59 24 Q. Okay. Have you talked to Mr. Daniel Freeman about his
- 08:53:03 25 patents?

- 08:53:03 1 A. No, I have not.
- 08:53:05 2 Q. Now, just to be clear, your '474 patent did not invent
- 08:53:11 3 using imaging to determine if the master key included a
- 08:53:16 4 pattern on one side or both sides; is that correct?
- 08:53:19 5 A. Correct.
- 08:53:20 6 Q. Let's go take a look at another statement from your
- 08:53:25 7 patent.
- 08:53:26 8 MR. PAK: Column 1, Line 51.
- 08:53:28 9 Q. (By Mr. Pak) The comparison of these features with
- 08:53:31 10 features stored in memory leads to determining and
- 08:53:35 11 selecting of a key blank used to duplicate the master key.
- 08:53:39 12 Do you see that, sir?
- 08:53:40 13 A. Yes.
- 08:53:41 14 Q. So the '474 patent, your patent, did not invent the
- 08:53:46 15 concept of storing features about key types in memory; is
- 08:53:53 16 that right?
- 08:53:53 17 A. Correct.
- 08:53:54 18 Q. And it also did not invent the concept of comparing the
- 08:53:57 19 scanned features with the features stored in memory,
- 08:54:02 20 correct?
- 08:54:02 21 A. Can you repeat that, please?
- 08:54:07 22 Q. Sure. Your '474 patent did not invent comparing the
- 08:54:10 23 scanned features of a key with features that are stored in
- 08:54:15 24 the memory of the system, correct? Your patent did not
- 08:54:21 25 invent that concept?

- 08:54:22 1 A. What do you mean by features stored in the memory of a
- 08:54:25 2 system?
- 08:54:25 3 Q. For example, the tooth pattern features? Do you
- 08:54:28 4 understand that?
- 08:54:28 5 A. I don't understand the question. It takes the image
- 08:54:31 6 and uses the patent --
- 08:54:33 7 Q. So let me go back to the language of the patent here,
- 08:54:36 8 your patent. It says: A comparison of these features with
- 08:54:40 9 features stored in memory leads to determining and
- 08:54:42 10 selecting of a key blank used to duplicate the master key.
- 08:54:46 11 Do you see that?
- 08:54:46 12 A. Right. That's the blank itself, correct, yes.
- 08:54:50 13 Q. And that's talking about the Drake patent from 2006,
- 08:54:52 14 correct?
- 08:54:52 15 A. Yes.
- 08:54:54 16 Q. So your '474 patent did not invent this concept that
- 08:54:58 17 we're seeing on the screen; is that right?
- 08:54:59 18 A. No. Hillman's P4 product did that also for quite some
- 08:55:04 19 time.
- 08:55:05 20 Q. Do you know when the P4 product was released?
- 08:55:09 21 A. I'm not sure of that exact date.
- 08:55:11 22 Q. And then do you see here there's another statement
- 08:55:18 23 about the Drake patent. The selected key blank is then
- 08:55:22 24 completely inserted into the machine without regard to
- 08:55:25 25 orientation, and the key blank is validated to ensure that

- 08:55:29 1 the proper key blank was retrieved by the user.
- 08:55:33 2 Do you see that?
- 08:55:33 3 A. Yes.
- 08:55:34 4 Q. So what you're describing is that in the Drake patent,
- 08:55:39 5 there's more than the shank of the key that is inserted to
- 08:55:43 6 identify the key; is that correct?
- 08:55:44 7 A. I'm sorry, could you repeat that one more time?
- 08:55:49 8 Q. Sure. According to your description of the Drake
- 08:55:51 9 patent, that system inserted more than the shank or the
- 08:55:56 10 blade of the key in order to identify the key type,
- 08:56:01 11 correct?
- 08:56:01 12 A. Well, I read it to say it gets completely inserted.
- 08:56:05 13 I'm not sure what it inserts, but it says: Completely
- 08:56:10 14 inserted.
- 08:56:10 15 Q. Completely inserted is more than the shank of the key,
- 08:56:14 16 right?
- 08:56:14 17 A. I don't know what the interpretation of that is.
- 08:56:16 18 Q. Well, one thing I heard you testify on direct is that
- 08:56:18 19 your patent, the '474 patent, is only about inserting just
- 08:56:22 20 the shank of a key, correct?
- 08:56:23 21 A. I believe I mentioned everything but the head of the
- 08:56:27 22 key. We have -- when you do a quantity of 200 to 300
- 08:56:32 23 different keys, there's a variety of ways -- a variety of
- 08:56:38 24 different types of keys. So on some of them, you want them
- 08:56:43 25 completely inserted. Other times it's advantageous to have

- 08:56:47 1 the shoulder inserted so you get different dimensions for
- 08:56:52 2 that particular key. So with that many keys, it varies --
- 08:56:55 3 the idea -- the intent of the whole idea was that
- 08:56:58 4 everything except the head of the key gets inserted into
- 08:57:02 5 the machine.
- 08:57:02 6 Q. Now, Mr. Schmidt, previously you testified that the
- 08:57:06 7 '474 patent invented the first key duplication machine in
- 08:57:12 8 which the user inserted the shank only of a master key. Do
- 08:57:17 9 you recall that testimony?
- 08:57:17 10 A. And I think the idea is that these patents that we're
- 08:57:25 11 talking about, the two that we're looking at, is that it's
- 08:57:29 12 a combination of all the components and all the features
- 08:57:34 13 within that system --
- 08:57:35 14 THE COURT: Let me stop you, Mr. Schmidt.
- 08:57:38 15 THE WITNESS: I'm sorry.
- 08:57:38 16 THE COURT: The question was: Do you recall that
- 08:57:41 17 testimony? You either recall that testimony or you don't
- 08:57:43 18 recall that testimony.
- 08:57:44 19 A. Okay. I'm sorry. Can you repeat the question, please?
- 08:57:51 20 Q. (By Mr. Pak) Sure. Do you recall testifying in your
- 08:57:53 21 previous deposition under oath that, in your opinion, the
- 08:57:56 22 '474 patent invented the first key duplication system where
- 08:58:01 23 the user only inserted the shank of the master key? Do you
- 08:58:05 24 recall that testimony?
- 08:58:06 25 A. No, I don't think I recall saying only the shank. I

- 08:58:14 1 might be mistaken, but I don't recall saying only the
- 08:58:18 2 shank.
- 08:58:18 3 Q. Can you in your --
- 08:58:20 4 A. Sorry.
- 08:58:20 5 Q. Mr. Schmidt, in your binder that's been handed to you,
- 08:58:24 6 if you look, you will see a tab called Schmidt Deposition
- 08:58:29 7 Transcript. And if you can turn to Page 31, Line 6, to
- 08:58:40 8 Page 31, Line 19.
- 08:58:53 9 A. I'm sorry, I'm at Page 31.
- 08:58:56 10 Q. Line 6. Are you there?
- 08:58:58 11 A. Line 6, yes -- yeah.
- 08:58:59 12 Q. Okay. And then if you go down to Line 15, do you see
- 08:59:02 13 the question: In your opinion?
- 08:59:04 14 A. Yes.
- 08:59:05 15 Q. Okay. I'm going to read this for you. Make sure I
- 08:59:08 16 read it correctly.
- 08:59:09 17 A. Sure.
- 08:59:09 18 Q. In your opinion, did the '474 patent invent the first
- 08:59:16 19 key duplication machine in which the user inserted the
- 08:59:19 20 master key's shank only?
- 08:59:22 21 And the answer was: As far as I know, yes.
- 08:59:26 22 That was your sworn testimony under oath, correct?
- 08:59:29 23 A. Yes.
- 08:59:38 24 MR. PAK: Okay. We can take this --
- 08:59:39 25 Q. (By Mr. Pak) Actually, I have one more question for

- 08:59:41 1 you on Drake.
- 08:59:44 2 You did not -- so if you go down to the Column
- 08:59:56 3 64 -- Line 64 in that same column: Once the key blank is
- 09:00:01 4 properly aligned, the key blank is moved onto a fixed
- 09:00:05 5 bottom member and a top member is pressed down along the
- 09:00:11 6 length of the key blank to clamp the key blank in --
- 09:00:16 7 MR. PAK: If we go to the next place.
- 09:00:18 8 Q. (By Mr. Pak) Do you see that, sir?
- 09:00:23 9 A. Yes.
- 09:00:23 10 Q. So, again, your patent did not invent the concept of
- 09:00:26 11 using a clamp to secure the inserted key for cutting,
- 09:00:32 12 correct?
- 09:00:32 13 A. It does use a clamp, but it doesn't go down the length
- 09:00:35 14 of the key, so it sounds a little different.
- 09:00:38 15 Q. Okay. But the concept of using a clamp in the cutting
- 09:00:41 16 process, that's not something that you invented, correct?
- 09:00:44 17 A. I'm sorry, was this the cutting process or the imaging
- 09:00:54 18 process?
- 09:00:54 19 Q. Let's talk about the imaging process first.
- 09:00:56 20 So using a clamp as part of an imaging process of
- 09:01:00 21 a key duplication system is not something that you invented
- 09:01:02 22 with your '474 patent, correct?
- 09:01:03 23 A. Correct.
- 09:01:05 24 Q. Okay. And then here it says: The two cutting wheels
- 09:01:10 25 located in Drake at opposing edges of the key blank are

- 09:01:15 1 then independently moved and operated to cut notches in the
- 09:01:20 2 key blank corresponding to the notches in the master key.
- 09:01:23 3 Do you see that, sir?
- 09:01:24 4 A. Yes.
- 09:01:25 5 Q. So, again, you did not invent with your '474 patent the
- 09:01:30 6 concept of using a cutting system to cut notches in the key
- 09:01:36 7 blank corresponding to the notches in the master key,
- 09:01:39 8 correct?
- 09:01:39 9 A. No, that was something that had been done for many
- 09:01:42 10 years with Hillman products.
- 09:01:45 11 Q. And we saw in the claim language of the '474 patent, it
- 09:01:48 12 talks about a user interface. Do you recall that?
- 09:01:51 13 A. Yes.
- 09:01:52 14 Q. Okay. The '474 patent, your patent, did not invent the
- 09:01:56 15 concept of including a user interface in a key duplication
- 09:02:01 16 kiosk, correct?
- 09:02:03 17 A. No. Other products have had that in the past, for
- 09:02:09 18 sure.
- 09:02:09 19 Q. And your '474 patent did not invent the concept of
- 09:02:12 20 using a touchscreen user interface for a key duplication
- 09:02:16 21 system, correct?
- 09:02:17 22 A. No.
- 09:02:18 23 Q. Correct? You did not invent that, correct?
- 09:02:23 24 A. Correct.
- 09:02:25 25 MR. PAK: Now we can take this down.

- 09:02:33 1 Q. (By Mr. Pak) If you turn to the -- your patent again.
- 09:02:41 2 And do you know, Mr. Schmidt, that as part of the
- 09:02:44 3 back and forth with the Patent Office, you and your lawyers
- 09:02:47 4 are required to submit what's called prior art that you
- 09:02:51 5 know about that relates to your patent? You know that?
- 09:02:55 6 A. Yes.
- 09:02:56 7 Q. And do you know that when prior art is submitted to the
- 09:02:58 8 Patent Office, they become listed on the front page of the
- 09:03:05 9 patent?
- 09:03:05 10 A. Yes.
- 09:03:05 11 Q. Okay. For example, if you turn to the next page of the
- 09:03:08 12 '474 patent, do you see there's something called References
- 09:03:14 13 Cited?
- 09:03:14 14 A. Yes.
- 09:03:14 15 Q. That means these are the prior art references that the
- 09:03:17 16 United States Patent Office considered in evaluating your
- 09:03:21 17 patent, correct?
- 09:03:21 18 A. Yes.
- 09:03:25 19 Q. Okay. And if you look further down, you will see
- 09:03:34 20 2011/0262240 to a gentleman named Mutch. Do you see that?
- 09:03:40 21 A. Yes.
- 09:03:41 22 Q. Okay. So you understand that one of the references
- 09:03:46 23 that was submitted to the Patent Office was a patent
- 09:03:51 24 application filed by a gentleman named Mutch?
- 09:03:53 25 A. Yes.

- 09:03:53 1 MR. PAK: So let's put DX-271, Mr. Jay, on the
- 09:04:02 2 screen.
- 09:04:06 3 Q. (By Mr. Pak) And if you go to the top, this is the
- 09:04:09 4 Mutch reference that we saw. And do you see William R.
- 09:04:09 5 Mutch?
- 09:04:09 6 A. Yes.
- 09:04:15 7 Q. That was the same name that we saw in the Drake
- 09:04:17 8 application, William R. Mutch. Do you remember that?
- 09:04:21 9 A. Yes.
- 09:04:21 10 Q. And do you see the assign that the company that owns
- 09:04:23 11 this patent is called Hy-Ko Products in Ohio? Do you see
- 09:04:28 12 that?
- 09:04:28 13 A. Yes.
- 09:04:28 14 Q. And at the bottom in 60, do you see provisional
- 09:04:31 15 application filed on January 23rd, 2006?
- 09:04:34 16 A. Yes.
- 09:04:35 17 Q. And do you recall that's the same date as the Drake
- 09:04:42 18 patent application that was filed on January 23rd, 2006?
- 09:04:44 19 A. Yes.
- 09:04:45 20 Q. Okay.
- 09:04:48 21 MR. PAK: And if you turn to Figure 5 of this
- 09:04:52 22 patent, Mr. Jay, if you can zero in.
- 09:04:58 23 Q. (By Mr. Pak) This is the Mutch key duplication
- 09:05:00 24 machine. Do you see that?
- 09:05:01 25 A. Yes.

- 09:05:01 1 Q. And do you see a key 22 there?
- 09:05:06 2 A. Yes.
- 09:05:06 3 Q. And do you see that the key 22 has been inserted into
- 09:05:11 4 the Mutch system with only the shank of the key being
- 09:05:15 5 inserted? Do you see that?
- 09:05:17 6 A. Yes.
- 09:05:17 7 Q. The head of that key has not been inserted into the
- 09:05:21 8 system, correct?
- 09:05:23 9 A. Correct.
- 09:05:23 10 Q. And do you see the opening is only big enough to accept
- 09:05:27 11 just the shank of the key?
- 09:05:28 12 A. It appears so, yes.
- 09:05:32 13 Q. So this came in 2006, right, sir?
- 09:05:37 14 A. Yes.
- 09:05:37 15 Q. Now, does this change your testimony regarding the fact
- 09:05:42 16 that there were other people out there that had developed
- 09:05:46 17 systems in which only the shank of the key had been
- 09:05:50 18 inserted?
- 09:05:51 19 A. It does in the sense of the details of it. I'm not
- 09:06:07 20 familiar with it, but the general concept --
- 09:06:09 21 O. Yeah.
- 09:06:10 22 A. -- looks like, yeah.
- 09:06:12 23 Q. Right. So the general concept of inserting only the
- 09:06:15 24 shank of the key was invented by somebody else in 2006,
- 09:06:20 25 Mr. Mutch, correct?

- 09:06:21 1 A. Yes.
- 09:06:31 2 MR. PAK: I pass the witness, Your Honor.
- 09:06:32 3 THE COURT: Is there redirect by the Plaintiff?
- 09:06:34 4 MR. IVEY: Yes, Your Honor, very briefly.
- 09:06:35 5 THE COURT: All right. Proceed when you're ready,
- 09:07:01 6 Mr. Ivey.
- 09:07:01 7 MR. IVEY: Thank you, Your Honor.
- 09:07:01 8 REDIRECT EXAMINATION
- 09:07:02 9 BY MR. IVEY:
- 09:07:02 10 Q. Mr. Schmidt, you were asked a number of questions about
- 09:07:06 11 the specification, Column 1 of the '474 patent, were you
- 09:07:08 12 not, just a moment ago?
- 09:07:09 13 A. Yes.
- 09:07:09 14 Q. And there was a discussion of individual elements from
- 09:07:12 15 a patent called Drake?
- 09:07:13 16 A. Yes.
- 09:07:13 17 Q. And you were also asked some questions about a patent
- 09:07:17 18 called Mutch a moment ago?
- 09:07:19 19 A. Yes.
- 09:07:19 20 Q. Now, if I'm understanding correctly, both of those
- 09:07:23 21 patents are actually discussed in the '474 patent; is that
- 09:07:28 22 fair to say?
- 09:07:29 23 A. Yes.
- 09:07:31 24 MR. IVEY: Now, if we could have, Mr. Lee, back up
- 09:07:34 25 for a moment, PPX-3.7 -- 3.7. Thank you.

- 09:07:39 1 Q. (By Mr. Ivey) Now, we have Figure 5, which we went
- 09:07:49 2 through yesterday with the jurors. Do you recall that?
- 09:07:52 3 A. Yes.
- 09:07:52 4 Q. And there were a number of items that you went through
- 09:07:55 5 both in the patent and in this figure; is that fair to say?
- 09:07:59 6 A. Yes.
- 09:07:59 7 Q. So there was a discussion about individual elements,
- 09:08:03 8 such as a slot, a laser, cameras, a backlight, user
- 09:08:12 9 interface, et cetera. Do you remember having that
- 09:08:15 10 discussion?
- 09:08:15 11 A. Yes.
- 09:08:15 12 Q. And you were asked a number of questions about that
- 09:08:18 13 right now, weren't you?
- 09:08:19 14 A. Yes.
- 09:08:19 15 Q. Was it ever your testimony that you are the inventor of
- 09:08:24 16 any of those individual elements as discussed in the '474
- 09:08:31 17 patent?
- 09:08:31 18 A. No. Not individually, no.
- 09:08:33 19 Q. Could you please tell the ladies and gentlemen of the
- 09:08:34 20 jury what is your invention with regard to these elements?
- 09:08:36 21 A. Again, the unique factor was a combination of all these
- 09:08:43 22 elements, as well as many features and components in terms
- 09:08:49 23 of the unit to do the 200 to 300 different types of keys to
- 09:08:53 24 create the digital image.
- 09:08:56 25 Q. And you are one of the inventors on the '474 patent