

1 SUPERIOR COURT OF CALIFORNIA
2 COUNTY OF SAN FRANCISCO
3 BEFORE THE HONORABLE ALEX SALDAMANDO, JUDGE PRESIDING
4 DEPARTMENT NUMBER 318

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6 PHILIP HOFFER, JR.,)
7 Plaintiff,) Case No. 413073
8 vs.) JURY TRIAL
9 ASBESTOS DEFENDANTS,) Volume 13
10 Defendants.) Pages 1315 - 1449
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12 Reporters' Transcript of Proceedings

13 Thursday, November 20, 2003

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28 Official Reporters

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1 Thursday, November 20, 2003

8:44 a.m.

2 (The following proceedings were heard in the presence of the
3 jury)

4 THE COURT: Good morning, ladies and gentlemen. Sorry for
5 the delay.

6 At this point, we're going to have to excuse Juror Number 6,
7 Ms. Perry. And so we need to seat a person at random. Do we
8 have the slips? We should have them somewhere.

9 Can't find them? Gail's at a meeting right now. We'll do
10 it when she gets back.

11 MR. KEELE: Yes, Your Honor.

12 THE COURT: So all of the alternates, pay special attention,
13 because one of you is going to become a regular juror in a few
14 minutes. It's a promotion, of sorts. No raise in pay, however.

15 A JUROR: The injustice of it all.

16 THE COURT: The record will reflect that all 15 jurors are
17 present, as well as all counsel, the parties and the witness.

18 Mr. Maccani is on the stand testifying. I believe you're
19 still on direct examination?

20 MR. KEELE: Yes, Your Honor.

21 ROBERT MACCANI,
22 called as a witness for the Defendant, having been previously
23 duly sworn, testified further as follows:

24 MR. KEELE: If I may proceed, Your Honor?

25 THE COURT: You may.

26 MR. KEELE: Thank you.

27 DIRECT EXAMINATION (resumed)

28 MR. KEELE: Q. Good morning, Mr. Maccani. How are you?

1 A. Just fine, thank you.

2 Q. With the Court's permission and Counsel's concurrence, if I

3 could ask you to step off the stand.

4 Is that permissible, Your Honor?

5 THE COURT: That's fine.

6 MR. KEELE: Thank you.

7 Q. And Mr. Maccani, if you could come down here, I'm going to

8 ask you to take this device, which I showed during my opening

9 statement, and walk us through, if you would, please -- first,

10 do you know what this is?

11 A. Yes.

12 Q. What is this?

13 A. That's a motor starter.

14 Q. Do you know what type or what series number?

15 A. Bulletin 500.

16 Q. And it was manufactured by Allen-Bradley?

17 A. Allen-Bradley.

18 Q. What I'd like for you to do, if you could, please, so that

19 the jury can see, is walk us through the various component parts

20 of this device. You have mentioned some sub-components

21 yesterday, and I just want to give everyone a flavor of what

22 we're talking about here. So I'll hand that off to you, unless

23 you want me to hold it.

24 A. No. Start off that way.

25 There it is. You can tell the difference between an

26 attorney and --

27 (Laughter)

28 A JUROR: Could you do that again?

1 THE WITNESS: Okay. Again, I tried to describe this
2 yesterday, the different parts.

3 This chamber up here (indicating) is called the arc chamber.
4 The parts in there are the arc chute parts that you'll hear
5 referred to at times. The reason it's called the arc chute is
6 that these are the conductive portions here (indicating), the
7 terminals where the electrician would connect the wires that go
8 to the motor or lighting system or whatever.

9 And there are contacts in there that are mounted. There is
10 two sets of contacts. One are considered the stationary
11 contacts, which are fixed up here. Then there are movable
12 contacts that are attached to a crossbar, which is difficult to
13 see, but it's in here (indicating).

14 This is called a crossbar (demonstrating). It moves up and
15 down when this coil here receives an impulse, electrical energy.
16 It's a solenoid coil, so it becomes a magnet. And it draws this
17 up into the -- the contacts. So that's how the device works.

18 This is called a coil cover here, because it actually just
19 pulls the coil in the device.

20 This part back here (indicating) is the base, because it's
21 just -- again, it's the insulator part of it that pulls and
22 guides the crossbar as it travels up and down. It's guided by
23 the base.

24 This is an auxiliary contact, which are used in just -- it's
25 not a necessary component to the starter; it's just another part
26 that goes on there.

27 This is an overload relay. And the overload relay below
28 here is what makes this a motor starter rather than a contact.

1 If you didn't have the relay on there, from here up would be a
2 contactor that you might use for your lights, lighting switches
3 or devices such as that. But when there is a motor involved,
4 you want overload protection, so you put an overload relay on
5 there.

6 Anything else?

7 Q. I think that will give us the basics. Thank you, sir.

8 You can go ahead.

9 (Discussion off the record between counsel.)

10 MR. KEELE: Sorry.

11 MR. ANDREAS: Would you like to use my pad?

12 MR. KEELE: No, not yet, thanks. Thank you.

13 A JUROR: We can tilt our heads.

14 MR. ANDREAS: Do you want it up higher?

15 MR. KEELE: No, that's fine.

16 MR. ANDREAS: Are you sure?

17 MR. KEELE: Used to this. Thank you, though.

18 Q. Okay. Sorry about that.

19 THE COURT: Did that exhibit have a number?

20 MR. KEELE: Not yet, Your Honor. I will.

21 Q. Mr. Maccani, what I'm going to ask you to do is to walk us
22 through the development and production of plastic parts, which
23 you've just described in the electrical components that we've
24 heard about.

25 And with that, I am going to draw on this pad, to give us
26 sort of a flowchart of how that works. And with that, if I
27 could mark this as the next defense exhibit in order, please?

28 Thank you.

1 THE COURT: That's exhibit what?

2 (Defendant's Exhibit 5023 marked for
3 identification)

4 MR. KEELE: 5023 will be my handwritten chart, based on your
5 testimony of the plastic production process. Okay?

6 THE WITNESS: All right.

7 MR. KEELE: Q. Now, you've described a number of plastic
8 parts, and just to list those again for us, Mr. Maccani, and
9 I'll put them off to the side here. What are the plastic parts
10 in an industrial motor control?

11 A. Well, there is the arc chute, which actually is three
12 different parts, but they're all the same, basically, same
13 material, same process.

14 Q. What else?

15 A. The crossbar; the base; the coil cover; and actually, on
16 that one that you have, an overload relay base.

17 MR. ANDREAS: I'm sorry. Is this for the item that you
18 termed the "motor starter"?

19 MR. KEELE: This is for --

20 MR. ANDREAS: It's vague, Judge.

21 THE COURT: Perhaps you could ask the witness to indicate
22 what these parts are, and are these typical of all devices, or
23 just this particular device?

24 MR. KEELE: Yes.

25 Q. The devices that you just described, arc chute, crossbar,
26 base, coil cover and overload relay base, are those typical
27 of --

28 A. Those are the necessary components for a motor starter, yes.

1 Q. Thank you.

2 A. The one item that wasn't was the auxiliary contact. That is

3 not necessary, so we can just skip that one. That isn't -- that

4 is not on all of our starter devices.

5 Q. Thank you. Now, excuse my back.

6 The plastic part, Mr. Maccani, that is the result of what

7 process?

8 A. Of the hot-molding process, basically.

9 MR. ANDREAS: Your Honor, could we get a time period on

10 this? It's vague.

11 MR. KEELE: Q. During what time period were plastic parts

12 made from the hot-molding process, Mr. Maccani?

13 A. If you're talking the starters, in general --

14 Q. Yes.

15 A. -- the beginning end would be from the '60s on to the

16 present time.

17 Q. Okay. Hot-molding process is the method of production of

18 plastic parts; correct?

19 A. That's correct. There are actually two hot-molding

20 processes used in making these parts.

21 Q. And what are those, sir?

22 A. One would be the process that is used to make the polyester

23 parts, would generally be injection molding. And the phenolic

24 parts, which, in this case, would also be injection molding, but

25 could be compression molding also. But they are two different

26 processes, because they use two different types of material.

27 Q. Okay. So we have compression molding and injection molding;

28 correct?

1 A. Correct.

2 Q. And you just said that they used two different types of

3 materials. Generally, what are those materials called?

4 A. Polyester molding and phenolic materials.

5 Q. And phenolics can be used both in the injection and -- or it

6 can be used in both injection and compression?

7 A. Yes, but not in the same -- not in the same equipment. A

8 different type of an injection molding machine is required for

9 phenolics.

10 Q. And what is the basic ingredient used in the hot-molding

11 process? What's that called?

12 A. That is a molding compound.

13 Q. And the molding compound, sir, do you know what are the

14 ingredients of the molding compound?

15 A. A molding compound is a combination of a polymer and

16 different types of ingredients. Typically, you would have a

17 filler; you would have a reinforcement; and then just to combine

18 a number, you would have different additives, such as pigments,

19 make it a different color; you would have lubricants so it's

20 easier to process, and different types of additives.

21 Q. So essentially, polymer, filler, reinforcement and

22 additives; correct?

23 A. That's correct.

24 Q. Now, are there different types of molding compounds used in

25 the hot-molding process?

26 A. Yes. Basically, with our parts as we showed here, some are

27 polyester molding compounds which are manufactured by using a

28 sigma-type mixer which is, I mentioned the other day about a

1 dough mixer.

2 A very simple mixture that mixes a liquid resin -- the
3 polymer, I should say, is liquid, in the case of polyester. So
4 you can mix it with a simple mixer to wet out the fibers.

5 Because this is the whole art in making a molding compound,
6 is to assure that you get a thorough distribution of your
7 reinforcement and your filler, and a coating of all the fillers
8 and reinforcement, so that you have a nice, consistent mixture.
9 That pretty much goes for phenolic materials, also, which end up
10 as a granular material.

11 In the processing and manufacture of a phenolic, you
12 actually process it through heated rolls, which actually
13 compress. They melt the polymer and force it to encapsulate all
14 the fibers and fillers that you have in there.

15 And, again, it's a very intensive process, pressure-wise.
16 Again --

17 Q. If I can stop you for just a minute, I'll get a question in
18 here, Mr. Maccani. So molding compound could be a polyester;
19 correct?

20 A. That's correct.

21 Q. But you also mentioned it can be a phenolic?

22 A. That's correct.

23 Q. What's the difference between a phenolic and polyester?

24 A. The basic difference, it uses a different polymer, which
25 gives it different types of properties. The second difference,
26 the polyester is typically a liquid material and the phenolic is
27 a solid material.

28 Q. You mentioned the process by which the molding compound is

1 made for phenolics is a heated rolling, or heat roll?

2 A. Yes.

3 Q. Can you explain that further?

4 A. Because you start out with a solid material. You have to

5 melt that, and so that's why you use heated rolls to do this.

6 And then you process it and mix it on the roller.

7 After that, you end up with a sheet of material which is

8 then ground up in a grinding machine to make it a powder.

9 Q. And Allen-Bradley purchased which type of molding compound?

10 A. Allen-Bradley purchased the phenolic-type molding compound.

11 Q. That was compound made from the heated process?

12 A. That's correct.

13 Q. And after it was heated and dried, it was ground?

14 A. It was ground.

15 Q. Into a powder form?

16 A. Into a powder form.

17 Q. That's how Allen-Bradley purchased it?

18 A. That's how we purchased it, yes.

19 Q. You mentioned the phrase it "wets the fiber" in conjunction

20 with the dough mixture process?

21 A. Right.

22 Q. Does the same happen with the heated roll process?

23 A. Oh, yes. That -- again, that's the science or art behind

24 making the molding compound, is to get your optimum physical

25 properties, such as strength -- impact strength or tensile

26 strength.

27 You have to thoroughly wet the fibers with the resin matrix

28 or polymer matrix. And, again, that's why you have to use such

1 an intensive process to do that.

2 Q. And the fibers that you're talking about that are wetted in
3 the process of producing the molding compound, Mr. Maccani, does
4 that include asbestos?

5 A. Oh, yes, it does include asbestos. It was used in very
6 small percentages in the phenolic molding compounds and, to a
7 lesser degree or greater degree in just one polyester molding
8 compound, that I know of.

9 Q. Is asbestos -- as far as these particular ingredients of a
10 molding compound, where would it fall? Is it a polymer?

11 A. No, it's a reinforcement. Typically, in polyester
12 compounds, you use fiberglass as the reinforcement.

13 In the case of the Allen-Bradley device that I just showed
14 you on the cross bar, there is a friction involved; because
15 there's a sliding motion as that cross bar activates and is
16 deactivated, and that friction causes wear.

17 So fiberglass, being a very abrasive type of reinforcement,
18 was replaced, to a significant degree, with asbestos, which is
19 much more slippery in that compound; yet, it did give it good
20 strength.

21 So that's why, in the cross bar material in that device, for
22 some time we used the compound with asbestos in there. But that
23 asbestos, we felt it was totally encapsulated.

24 MR. ANDREAS: Excuse me, nonresponsive.

25 THE COURT: Sustained. Last part of the answer is stricken.

26 MR. KEELE: I'll ask a question, Mr. Maccani.

27 Q. What was your view and understanding of the physical
28 property of the asbestos fiber after it went through the

1 production of the molding compound as a result of this wetting
2 process?

3 A. After the processing or after the molding? I'm not sure.

4 Q. Well, at this stage you've got production of molding
5 compound. That's a material; correct?

6 A. Correct.

7 Q. What's your view and understanding, based upon your
8 experience in working with these materials and your experience
9 as a polymer chemist, of what the physical properties are of
10 that asbestos fiber as a result of this production process, the
11 molding material production process?

12 A. I would expect that the asbestos is coated with the polymer.
13 It's because -- that is how we get the properties. If it wasn't
14 coating it thoroughly, if it wasn't totally encapsulating the
15 fibers, it wouldn't have the strength.

16 In some cases, using fiberglass as reinforcement, you
17 actually will put a treatment, a surface treatment on the
18 fiberglass, a sizing agent, so that you get better bonding
19 between the polymer and the fiberglass.

20 In the case of asbestos, there is a reaction there that
21 didn't require that type of a bonding, because of the chemical
22 structure.

23 Q. Now, did all plastic component parts contain asbestos as
24 reinforcers?

25 A. No, they did not.

26 MR. ANDREAS: Vague as to time.

27 THE COURT: I want you to be more specific.

28 MR. KEELE: I'll clarify.

1 Q. Mr. Maccani, do you know whether, during the 1950s, all
2 plastic component parts of the motor controls contained asbestos
3 as reinforcement?

4 A. No, they did not.

5 Q. During the 1960s, was that the case?

6 A. Not all of them, no.

7 Q. How about during the 1970s?

8 A. No.

9 Q. Now, can you explain for us how the molding compound is used
10 in the injection molding process to make the plastic part?

11 A. The molding compound, in the case of either the polyester or
12 the phenolic, goes into what's called an injection molding
13 machine, which has a cylinder which rotates.

14 It's basically like a screw, like an auger that forces the
15 material through a passageway into the mold. So that's why it's
16 called "injection molding." You're injecting that material into
17 the mold.

18 In the mold, the material, being a thermosetting material,
19 undergoes a chemical reaction, becomes, by definition, an
20 infusible, insoluble mass.

21 Q. And how is the molding compound used in the compression
22 molding process to make the plastic part?

23 A. In the compression molding process, the material is placed
24 into a cavity. And it can be either -- sometimes we would make
25 pre-forms before -- or hockey pucks -- before we put it into the
26 cavity. So that would be a way of measuring how much material
27 you were putting into the cavity.

28 So that would be placed into the cavity. Then, again, it

1 would be compressed under heat and pressure; again, the chemical
2 reaction would convert it to a thermoset plastic part.

3 MR. KEELE: Just so the record is clear, Your Honor, I have
4 drawn an A, capital A, with a circle around it, to note the
5 presence of asbestos in the reinforcement ingredient of the
6 molding compound. So the record is clear on this exhibit.

7 Q. Mr. Maccani, during the hot-molding process, does anything
8 further or additional happen to the fiber as a result of this
9 process, as far as its physical properties?

10 MR. ANDREAS: Again, hot-molding --

11 MR. KEELE: Talking about the hot-molding process.

12 THE COURT: That was a question.

13 THE WITNESS: Yes. Prior to that, the polymer is in an
14 undercured state. In other words, it has not undergone this
15 thermosetting reaction, as of that point.

16 After it's molded, it has become a thermoset plastic or
17 polymer, and it cannot be removed by solvents, or whatever. It
18 becomes a harder substance, compound.

19 MR. KEELE: Q. Yesterday, you mentioned transfer molding.
20 Can you explain that process? How does it fit into this, if at
21 all?

22 A. The parts I showed you, I don't think any of them were
23 transfer molded. But, basically, the molding process always has
24 the cavity which forms a sheet for the final plastic part.

25 The different processes just use different techniques of
26 getting that material into that cavity. In compression molding,
27 you place material directly in the cavity; compress it; and mold
28 it.

1 In injection molding, I mentioned you put it into this
2 machine that has a screw and augers it, injects it into the
3 cavity.

4 In transfer molding, you put the material into what's called
5 a pot, and the pot has a little runner that goes between the dye
6 halves, into the cavity. You transfer that material with
7 pressure from the pot into the cavity, so that's why it's called
8 "transfer molding."

9 Q. Allen-Bradley purchased molding compound; correct?

10 A. That's correct.

11 Q. Who during, let's say, the 1960s and 1970s, were the
12 suppliers of molding compound to Allen-Bradley?

13 A. Our major suppliers were Durez, a division of Hooker
14 Chemical; Plastics Engineering Company, PLENCO; and Reichhold
15 Chemical Company, were the three major suppliers.

16 Q. Did Allen-Bradley purchase molding compound from Rostone?

17 A. No, Rostone did not sell any molding compound. They only
18 sold molded parts.

19 Q. Did Rostone, to your knowledge, sir -- I think you testified
20 yesterday had a hot-molding process?

21 A. That's correct.

22 MR. ANDREAS: Vague as to time. I believe the witness
23 testified yesterday they did.

24 THE COURT: Overruled.

25 Q. That's the molding. How are you familiar with Rostone's
26 hot-molding process to give us some context, here?

27 A. Allen-Bradley worked with Rostone, because we were very
28 dependent on them as a major supplier of plastic parts.

1 We provided technical support and services to them in the
2 way of designed experiments, and in the way of technical
3 knowledge, analytical knowledge, analytical instrumentation that
4 we had at Allen-Bradley that Rostone did not have there.

5 So on many occasions, I travelled to Rostone to survey some
6 of their problems, to see their progress on different advances.

7 Q. Was there -- did Allen-Bradley -- you were in the plastics
8 laboratory at Allen-Bradley?

9 A. That's correct.

10 Q. Did Allen-Bradley set up anything in its laboratory
11 concerning Rostone's hot-mold process?

12 MR. ANDREAS: Vague as to time.

13 THE COURT: What time are we talking about?

14 MR. KEELE: I was just going to get a "yes" or "no," and
15 then ask when.

16 THE WITNESS: Yes.

17 MR. KEELE: Q. When did Allen-Bradley do that?

18 A. Allen-Bradley set up a process similar to Rostone's,
19 probably in the early '60s. And we were working on a different
20 type of project, but it used the same type of material, the
21 polyester material, liquid material, that Rostone had.

22 So we set up a process which was virtually identical to the
23 Rostone process.

24 Q. And for how long did you maintain that setup in the
25 laboratory at Allen-Bradley?

26 A. We had that upwards of 20 years.

27 Q. Now, Mr. Maccani, as the manager of the plastics laboratory
28 and various materials divisions at Allen-Bradley, as you

1 described yesterday, did you ever suspect that asbestos fibers
2 could be released from the hard plastic part of the electrical
3 components?

4 MR. ANDREAS: Objection, no foundation.

5 THE COURT: Overruled.

6 THE WITNESS: Yes. We had numerous conversations at
7 technical conferences with suppliers of plastic molding
8 materials that reported to us that they --

9 MR. ANDREAS: Objection, Your Honor. This is hearsay.

10 THE COURT: All right. It's limited for this witness' state
11 of mind, not for the truth of the matter.

12 MR. ANDREAS: It's also, Judge, cumulative at this point.

13 THE COURT: Well, I remember what he testified to yesterday,
14 and that part's overruled.

15 You may answer the question.

16 MR. ANDREAS: Well --

17 THE WITNESS: Would you repeat the question, please?

18 MR. ANDREAS: To be clear for the record, Judge,

19 cumulative --

20 THE COURT: Counsel, I've overruled the objection. Can we
21 proceed?

22 And can you come back here and sit at your seat, please?

23 MR. ANDREAS: I was trying to see the chart. I'm sorry.

24 THE COURT: It's overruled.

25 You may answer the question.

26 MR. KEELE: Q. The question, Mr. Maccani, is: Did you
27 suspect that asbestos fibers could be released from the hard
28 plastic part of the electrical components?

1 A. Okay. And I said "no," because at technical conferences
2 where we participated with material suppliers, they told us that
3 in their process, which was one step back from where we would
4 get it, because they were the ones that would mix crude asbestos
5 fibers into their compounds, and then they would process it like
6 I mentioned before, on the hot rolling process. And then they
7 would grind it up.

8 And in that grinding operation, these still are not
9 thermosetted polymers. They have not totally reacted. So
10 they're still a little bit more mobile.

11 And the reports coming back were that they were not
12 exceeding the OSHA limits at that time, that they were not --
13 they did not have a concern about pre-asbestos fibers coming off
14 of their compounds.

15 We, on the other hand, took it one step further, and in
16 processing this and in molding it into this thermoset part, that
17 bound that fiber even tighter into that matrix. And so again,
18 we were not concerned.

19 MR. ANDREAS: Well, you know, objection, Your Honor. This
20 is vague as to time.

21 THE COURT: I believe the witness was asked the question on
22 a time basis.

23 THE WITNESS: This was probably in the early '70s when this
24 first came --

25 MR. KEELE: Q. You said "when this first came,"

26 Mr. Maccani. What are you referring to?

27 A. Our understanding of an asbestos problem in the industry.

28 Q. Well, if you could, Mr. Maccani, what asbestos problem are

1 you referring to in the early '70s?

2 A. That's mostly not in the plastics industry, but it was in
3 different types of industries, the mining, where the asbestos
4 was actually mined, and they found that that was causing health
5 problems in that type of industry.

6 Q. So during the 1950s, you did not suspect that asbestos
7 fibers could be released from these parts; correct?

8 A. No, I did not.

9 Q. The same is true for the 1960s?

10 A. That's correct.

11 Q. In response to this information you were getting in the
12 early 1970s, based upon OSHA levels, did Allen-Bradley do
13 anything?

14 A. Yes. We embarked on a project to replace all of our
15 compounds that did contain any asbestos at all.
16 We inquired of our various suppliers if their compounds
17 contained asbestos. If they did, we asked them to remove them.

18 And we had a project to evaluate all of these alternate
19 materials, non-asbestos-containing materials.

20 Q. Did Allen-Bradley take any steps beyond that to replace or
21 to ensure that the plastic parts on its components did not
22 contain asbestos?

23 A. Yes. We worked closely with Rostone, because we had the
24 crossbar material and the base material that, at one time, did
25 contain asbestos, in a significant percentage.

26 And they were able to replace the base compound very
27 quickly, but the crossbar was more of a problem, because they
28 weren't getting the strength and the wear resistance from

1 alternate materials.

2 So we worked very closely with -- between Milwaukee and
3 Rostone in trying to evaluate different types of reinforcement
4 materials, such as nylons and Kevlar and all different types of
5 nonabrasive-type reinforcements.

6 Q. And during the 1970s, Mr. Maccani, did Allen-Bradley -- was
7 there a replacement program to replace parts with asbestos with
8 parts that didn't have asbestos?

9 A. Yes. I was responsible for a project to replace all
10 asbestos-containing compounds that were used in Allen-Bradley
11 products at that time.

12 Q. And when did that program occur?

13 A. That was in the middle '70s. We completed it in, I think,
14 1976 for all the materials except for that crossbar, Rostone
15 crossbar.

16 Q. And just to be clear, Mr. Maccani, prior to 1976, did all
17 plastic components of all Allen-Bradley products contain
18 asbestos?

19 A. Not all, no.

20 Q. Which ones did?

21 A. There were a number of phenolic molding compounds, molded
22 parts that did contain asbestos, some of the Durez compounds,
23 some of the PLENCO compounds, some of the Reichhold compounds.

24 Q. And in which of these plastic parts was asbestos used?

25 A. In the overload relay housing there I've described, relay
26 base, overload relay base at one time had some small amount of
27 asbestos.

28 It was common, in the phenolic industry, to add a pinch, so

1 to speak, of asbestos to the compounds, recognizing that in the
2 early '60s, et cetera, compounding was more of an art than a
3 science. We didn't have all the instrumentation at that time to
4 really understand why things were working the way they did.

5 But through experimentation, trial and error
6 experimentation, they found that a little bit of asbestos helped
7 the compound, so they put it into many different compounds.

8 Q. First, are you familiar with a product line that
9 Allen-Bradley made called the Series K?

10 A. Yes, I am.

11 Q. And what is a Series K product that Allen-Bradley made?

12 A. That was the motor starter line that was prior to the
13 Bulletin 500. The Bulletin 500 was -- it had the same
14 functions, basically, as the Bulletin 500, but it was just an
15 older series. The Bulletin 500 had some advantages, so that was
16 meant to replace the Series K. So it had the same function.

17 Q. Do you know during what years Allen-Bradley made Series K
18 products?

19 A. From the middle '60s, probably, on. I don't know that they
20 ever obsoleted it.

21 Q. And do you know when Allen-Bradley began to make the
22 Bulletin 500 series of products?

23 A. That was in the late '60s, early '70s.

24 Q. Did Series K and Bulletin 500 starters and contactors have
25 Rostone subcomponents, to your knowledge?

26 A. Yes, both of them did, yes. But only the Bulletin 500 had
27 the asbestos-containing Rostone compound.

28 Q. During the 1950s -- that's the time frame, Mr. Maccani --

1 are you familiar with some of Allen-Bradley's competitors during
2 that time frame, in the production and sale of electrical motor
3 controls?

4 A. Yes, I am.

5 Q. And who are they?

6 A. Cutler-Hammer and Square D, Westinghouse, General Electric.

7 Q. And are you familiar with the electrical component products
8 that those companies made in the 1950s?

9 MR. ANDREAS: Vague.

10 THE COURT: Calls for a "yes" or "no" answer at this point.

11 THE WITNESS: Yes.

12 MR. KEELE: Q. And which types of products did those
13 entities make during the 1950s?

14 A. I should qualify I'm aware of some of their products. I'm
15 not aware of their complete product lines.

16 Cutler-Hammer and Square D. were competitors of
17 Allen-Bradley, and as such, we analyzed their devices to see how
18 they rated, how ours rated against theirs. So we, again, looked
19 into what they made, their materials, what materials they used,
20 et cetera.

21 Q. Would the same be true for the 1960s and 1970s, as far as
22 what you knew about those companies and their products?

23 A. Yes. That was sort of ongoing.

24 Q. Mr. Maccani, do you know whether, during the 1950s and
25 1960s, any of the companies you've just referenced molded parts
26 for their electrical components?

27 MR. ANDREAS: Objection, no foundation.

28 THE COURT: You may answer it, if you know.

1 THE WITNESS: I do.

2 Yes, they did.

3 MR. KEELE: Q. And how do you know that, Mr. Maccani?

4 A. I, again, worked with the gentlemen that had similar

5 positions as mine, through technical organizations.

6 At that time, again, plastics was a growing science, and we

7 shared a lot of information, not proprietary information, but

8 technical information. So I was very much aware of it.

9 MR. ANDREAS: Excuse me. Move to strike as based on

10 hearsay, Judge.

11 THE COURT: Well, under submission at this point. I'm not

12 sure exactly how he gained this information, or what, in fact,

13 he gained.

14 MR. KEELE: Q. Mr. Maccani, based upon this knowledge that

15 you just described, did any of these companies mold parts for

16 their electrical components?

17 MR. ANDREAS: Again, based on hearsay, based on prior

18 response, Judge.

19 THE COURT: Go to the side bar.

20 (Side bar conference heard, not reported.)

21 THE COURT: Next question.

22 MR. KEELE: Thank you, Your Honor.

23 Q. Mr. Maccani, during the 1950s and 1960s, you were familiar

24 with the products, electrical products, that GE, Westinghouse,

25 Cutler-Hammer and Square D. made; correct?

26 A. That's correct.

27 Q. And did you actually, personally, see these components?

28 A. Yes. Some of them, yes.

1 Q. And from observing these components, did you have an
2 understanding, based upon your experience, of the materials that
3 were used in making these components?

4 MR. ANDREAS: Well, objection, Your Honor, no foundation.

5 THE COURT: Do you want to lay a foundation, please?

6 MR. KEELE: Q. Did the products that you observed
7 manufactured by these component makers, did those have the same
8 function and same look and same appearance as the products that
9 Allen-Bradley made?

10 MR. ANDREAS: No foundation, Judge.

11 MR. KEELE: Q. Do you know what an electrical motor starter
12 was?

13 THE COURT: Wait a minute. He was asked what he observed,
14 so overruled.

15 MR. KEELE: Thank you.

16 THE WITNESS: Yes.

17 MR. KEELE: Q. And in appearance, did those components made
18 by Cutler-Hammer, GE, Westinghouse and Square D. resemble or
19 look like the products Allen-Bradley made?

20 A. Yes, they did.

21 Q. Based upon your knowledge of how those devices functioned,
22 did they have the same application and similar function to the
23 products Allen-Bradley made?

24 MR. ANDREAS: No foundation for that, Judge.

25 THE COURT: Overruled.

26 THE WITNESS: Yes, they did.

27 MR. KEELE: Q. And based upon your knowledge of the
28 materials necessary to make these components, Mr. Maccani, did

1 they use the same type of materials that Allen-Bradley used in
2 making its components?

3 MR. ANDREAS: Objection, Your Honor, no foundation.

4 THE COURT: Overruled.

5 THE WITNESS: Yes, they did.

6 MR. KEELE: Q. Did you read any technical bulletins or any
7 company literature from any of these companies as to the process
8 that they undertook to make their electrical components?

9 A. We participated with these people in a technical conference,
10 and at those technical conferences, yes, we shared common
11 concerns about common molding processes and common materials.

12 MR. ANDREAS: Objection, Your Honor. This is vague as to
13 time, and it's leading, and hearsay.

14 THE COURT: Overruled. The answer stands.

15 Next question.

16 MR. KEELE: Q. And based upon this wealth -- this
17 information -- not wealth of information, but information that
18 you've just described, Mr. Maccani, do you have an
19 understanding -- do you know whether these component makers
20 molded parts for their electrical components?

21 MR. ANDREAS: Objection, Your Honor. It's hearsay.

22 THE COURT: Sustained, as asked.

23 MR. KEELE: I'll move on, Your Honor.

24 Q. Are you familiar with a component called a resistor?

25 A. Yes, I am.

26 Q. Did you participate in -- let me rephrase. Did
27 Allen-Bradley make resistors?

28 A. Yes, they did.

1 Q. During the time that you were at Allen-Bradley, did they
2 make resistors?

3 A. Yes, they did.

4 Q. Were you involved in that process at all?

5 A. Yes, I was.

6 Q. Beginning when?

7 A. In 1954.

8 Q. And for how long did you participate in the production of
9 resistors at Allen-Bradley?

10 A. Five to ten years.

11 Q. So you know what a resistor is?

12 A. Yes. That was my first job at Allen-Bradley.

13 Q. What's a resistor?

14 A. A resistor is a electrical component put into a circuit that
15 provides just that, resistance, to electricity. And it's very
16 necessary in radios at that time, and various functions such as
17 that. But basically, it provided an electrical resistance.

18 Q. And do you know what a resistor looks like?

19 A. Yes, I do.

20 MR. KEELE: And with the Court's permission and Counsel's
21 concurrence, I'm going to show the witness a demonstrative, if I
22 may, Your Honor?

23 THE COURT: Have you seen it, Counsel?

24 MR. ANDREAS: Yes, I have.

25 THE COURT: Okay.

26 MR. KEELE: If I may approach, Your Honor?

27 THE COURT: Could we mark that as an exhibit?

28 MR. KEELE: Of course. Sorry.

1 MR. ANDREAS: Your Honor, could we have the other exemplar
2 marked, as well?

3 THE COURT: The original one you showed him, can we have
4 that marked as next in order, and next is that one.

5 THE CLERK: You want it marked first?

6 The component is 5024; and the hot-molded fixed resistors is
7 5025.

8 (Defendant's Exhibits 5024 and 5025
9 marked for identification)

10 MR. KEELE: Thank you.

11 If I may approach, Your Honor?

12 THE COURT: You may.

13 MR. KEELE: Q. Mr. Maccani, I am going to show you -- it's
14 like a Lucite block with various items in there. Do you
15 recognize this?

16 A. Yes, I do.

17 Q. Well, do you recognize the components within the Lucite
18 block?

19 A. Yes, I do.

20 Q. And what are they?

21 A. Those are resistors. They're different sizes.

22 Q. And these are the type of resistors that you participated in
23 making when you were at Allen-Bradley?

24 A. That's correct.

25 Q. Can you just tell -- describe for us the various sizes and
26 functions of these different resistors, just to give us a flavor
27 of what a resistor is?

28 MR. ANDREAS: If you want to use my device to show it to the

1 jury, it might show up better.

2 MR. KEELE: Sure. That would be great. Thank you.

3 If that's all right, Your Honor? Thank you.

4 THE COURT: Yes.

5 MR. KEELE: Can Mr. Maccani step off, go to the screen,
6 please.

7 MR. ANDREAS: I can't see.

8 MR. KEELE: Q. Mr. Maccani, you identified these as
9 resistors; correct?

10 A. Right. Hot-molded composition resistors.

11 Q. What does that mean?

12 A. Made by a hot-molding process; basically, different
13 compositions.

14 Q. What were the different materials used in making resistors
15 -- let me rephrase.

16 During the time period you were involved in this production
17 of resistors, what materials were used?

18 A. The polymer we used was a phenolic resin. I was responsible
19 for making the phenolic resin that went into the insulation;
20 because the composition -- the resistor is a combination of a
21 conducted portion inside, and also then an insulation that goes
22 over the outside.

23 Allen-Bradley would make their own phenolic resin used in
24 the insulation on the outside on the larger resistors. We
25 worked for many years to develop a phenolic resin to be used in
26 the conductive portion.

27 We eventually did. We started using it in smaller-sized
28 resistors, the CB and eight-watt BB resistors. We actually made

1 all the resin for the insulation and the conductive portion. In
2 the smaller resistors, we made all the resin that went into the
3 insulation on the larger resistors.

4 Q. During the time that you were involved in the production of
5 these resistors, did any material used in the resistors contain
6 asbestos?

7 A. No, we never used any asbestos in resistors.

8 Q. As part of your responsibilities for -- I think you said you
9 were manager of materials technology for Allen-Bradley during a
10 certain period?

11 A. Not at that time, no. I was just a polymer chemist, fresh
12 out of college.

13 Q. At a later time, you were manager?

14 A. Technology.

15 Q. During what years was that?

16 A. Middle '70s on.

17 Q. Prior to that, you were the manager of plastics?

18 A. Plastics laboratory.

19 Q. As part of your responsibilities in those roles,

20 Mr. Maccani, did you keep informed of the materials that were
21 used in resistors that were made after you graduated from the
22 polymer chemist role?

23 A. Yes, I did.

24 Q. At any time during your tenure at Allen-Bradley, based upon
25 your knowledge of materials used in the production of resistors,
26 did the resistors ever contain asbestos?

27 A. No, they didn't.

28 MR. KEELE: Thank you. You can resume your seat.

1 Q. Mr. Maccani, are you familiar with a component called a
2 capacitor?

3 A. Yes, I am.

4 Q. Were you ever involved with production of capacitors at
5 Allen-Bradley?

6 A. Yes. We formulated and manufactured the insulation that
7 went around the capacitors.

8 Q. What is a capacitor, Mr. Maccani?

9 A. Now you're getting into my areas I'm not very good at; but
10 it's basically, again, an electrical component that stores
11 energy, electrical energy. That's about all I can tell you, not
12 being an electrical engineer.

13 Q. What does a capacitor look like, if you can describe?

14 A. The capacitors that Allen-Bradley made were -- they had two
15 leads, conductive leads, similar to the resistor, except they
16 came out in parallel on the bottom. They were disc-shaped, and
17 they were formed by putting a metal conductor on two sides of a
18 ceramic disc.

19 And then it was -- insulation was dipped over that, over the
20 surface.

21 Q. During your tenure at Allen-Bradley, did any capacitors that
22 Allen-Bradley made contain asbestos?

23 A. No, they did not.

24 MR. KEELE: If I may approach, Your Honor.

25 THE COURT: You may.

26 (Defense Exhibit 5026 marked for
27 identification)

28 MR. KEELE: Q. Mr. Maccani, I'm going to hand you a

1 document marked Exhibit 5026, two pages, in the lower right-hand
2 corner. I will represent that the document stated the date of
3 February -- and I can't read the next couple things, but the
4 year is 1951. Do you see that?

5 A. I see that.

6 Q. That predates your tenure, your employment at Allen-Bradley,
7 right?

8 A. That's correct.

9 Q. The reason I'm handing this to you, Mr. Maccani, is to ask
10 if you recognize the form and type of document that I've handed
11 to you, which is called Request for Change and Change Notice.
12 Do you recognize that?

13 A. It's similar to the forms that we used in later years for
14 all engineering changes. I notice on the bottom it has a form
15 number, so this probably was a predecessor to the change notices
16 that we had, the engineering change notices.

17 Q. In your working at Allen-Bradley, Mr. Maccani, did you see
18 documents similar to this within the files of Allen-Bradley?

19 A. Similar to this, but not on this actual form, right.

20 Q. And this has "request for change and change notice." Would
21 a request for change and change notice be part and parcel of
22 business, of production of Allen-Bradley products?

23 A. Yes. Once a device was built, released for manufacturing,
24 any change, then, would have to be documented on a document such
25 as this for any dimensional change, any material change. So
26 that it would go into our records.

27 Q. Do you have any doubt that this is not an Allen-Bradley
28 document?

1 MR. ANDREAS: Relevance.

2 MR. KEELE: Q. I'll rephrase.

3 Q. Is there anything on the face of the document that would

4 indicate this is not from Allen-Bradley's business records?

5 A. No, I noticing nothing.

6 Q. And this says Milwaukee Allen-Bradley company, Wisconsin?

7 A. Yes.

8 Q. On the printed part of the form?

9 A. Correct.

10 MR. KEELE: I would ask that Exhibit 5026 be admitted into

11 evidence.

12 THE COURT: Any objection.

13 MR. ANDREAS: Yes, there is. On foundation.

14 THE COURT: All right, under submission.

15 MR. KEELE: Q. Mr. Maccani, did you work with document

16 request changes provided, notice of changes, during the

17 production process at Allen-Bradley?

18 A. Yes, I did. As I mentioned, any change in materials or

19 dimensions, et cetera, would have to be documented on what we

20 call ECNs, or engineering change notices.

21 When the change was in the plastic material, I frequently

22 had to sign off on that, to acknowledge the change.

23 Q. And if you could look at the substance -- don't read it out

24 loud.

25 If you can look at the substance of the information

26 contained in the document, is that typical of, or similar to,

27 the information that was in the document requesting and noticing

28 change that you just referenced?

1 A. Yes, this would be consistent with that.

2 Q. Thank you. Rostone Corporation -- getting back to the

3 production of molding materials, Rostone Corporation did what on

4 this flow chart, Mr. Maccani, to your knowledge?

5 A. Rostone made the molding compound. So they processed all

6 the polymer and the different pillars and reinforcements; and

7 then they also performed the hot-molding process.

8 They only sold molded plastic parts. You could -- they did

9 not sell any molding material.

10 MR. ANDREAS: Your Honor, that last response is vague as to

11 time, as far as hot-molding.

12 THE COURT: All right. Do you want to lay a foundation,

13 what time this was?

14 MR. KEELE: Q. Mr. Maccani, during what time did Rostone

15 make molded plastic parts from the hot-molding process?

16 A. From my knowledge, it's from the '60s, on through the

17 present time.

18 Q. So you first became familiar with Rostone Corporation,

19 really, in the 1960s; is that correct?

20 A. That's correct.

21 Q. Did you become familiar with any other customers or

22 companies to whom Rostone sold molded plastic parts?

23 MR. ANDREAS: Objection, Your Honor. No foundation.

24 THE COURT: Sustained, as asked.

25 MR. KEELE: Well...

26 THE COURT: All right.

27 MR. KEELE: Q. While you were at Allen-Bradley,

28 Mr. Maccani, after you became aware of Rostone Corporation, did

1 you ever come to know of any other customers of Rostone

2 Corporation for molded plastic parts?

3 MR. ANDREAS: The same objection.

4 THE COURT: This one calls for a yes-or-no answer.

5 THE WITNESS: Yes.

6 MR. KEELE: Q. How did you come to know that information,

7 Mr. Maccani?

8 A. Through conversations with, again, engineers and Rostone.

9 MR. ANDREAS: Move to strike. Based on hearsay, judge.

10 MR. KEELE: I'll rephrase -- withdraw and rephrase.

11 Q. Through working with Rostone Corporation and your knowledge

12 of its production process and component parts, did you come to

13 learn of other customers at Rostone Corporation?

14 A. Yes, I did.

15 Q. Through your experience in the molded plastic part industry,

16 did you come to learn of other customers of Rostone Corporation?

17 A. Yes, I did.

18 Q. Who were they?

19 MR. ANDREAS: The same objection, judge.

20 THE COURT: As to foundation, how he came to learn, that's

21 unclear. Sustained, as asked.

22 MR. KEELE: Q. How did you come to learn this information?

23 A. Discussions with Rostone. They, actually, when

24 Allen-Bradley --

25 MR. ANDREAS: Well, objection, Your Honor. This is hearsay.

26 MR. KEELE: I'll rephrase.

27 Q. Did you see any customer lists of Rostone Corporation?

28 A. No, I did not.

1 Q. Did you see any written materials that identified customers
2 after Rostone?

3 A. No, I did not.

4 Q. Did any of the technical literature that you reviewed
5 identify any other customers of Rostone?

6 MR. ANDREAS: Vague as to "technical material."
7 Publications?

8 MR. KEELE: I'll rephrase, Your Honor.

9 Q. In any document that you've ever reviewed, Mr. Maccani, any
10 document that you reviewed during the time you were with
11 Allen-Bradley, did you ever read who were other customers of
12 Rostone Corporation?

13 A. I can't recall any.

14 Q. Okay, fair enough. Thank you. Mr. Maccani, to your
15 knowledge, Mr. Maccani, during the 1950s, were there companies
16 -- who were the companies -- or do you know the companies who
17 processed molding compounds into plastic parts?

18 MR. ANDREAS: Vague, as to which molding compounds.

19 THE COURT: Overruled. At this point, calls for yes-or-no
20 answer.

21 THE WITNESS: Yes, I do.

22 MR. KEELE: Q. Which molding compounds are you familiar
23 with that were molded into plastic parts in the 1950s?

24 A. Phenolics and melamines.

25 Q. Which companies processed or molded molding compounds into
26 plastic parts in the 1950s?

27 A. Square-D, Cutler-Hammer, Allen-Bradley and a variety of
28 custom molders.

1 Q. Who were some of the custom molders?

2 A. The ones that come to mind are Dickten & Maasch, Woodland

3 Plastics.

4 Q. Are you familiar with companies who molded -- who processed

5 molded molding compounds, or made plastic parts for molding

6 compounds in the 1960s?

7 A. All of the above.

8 Q. How about 1970s?

9 A. The same.

10 MR. KEELE: If I could have just one second, Your Honor?

11 I'm sorry.

12 (Pause in proceedings)

13 MR. KEELE: Thank you, Mr. Maccani.

14 THE COURT: Cross-examination.

15 MR. ANDREAS: Thank you.

16 CROSS-EXAMINATION

17 MR. ANDREAS: Q. Good morning, Mr. Maccani.

18 A. Good morning.

19 Q. I feel like we've already met because we've heard from you,

20 in a manner of speaking. We read your trial testimony from a

21 trial in 2002, the Wells case, earlier in this trial.

22 First of all, do you remember the Wells case?

23 A. Yes, I do.

24 Q. You testified out here in San Francisco for Mr. Keele?

25 A. Yes, I did.

26 Q. And you were under oath at that time; correct?

27 A. That's correct.

28 Q. And you take the oath seriously; do you not?

1 A. Yes, I do.

2 Q. I'm going to try not to repeat a lot of what we already

3 heard in that prior trial testimony transcript.

4 Excuse me one second.

5 Your Honor, I am going to have a number of documents that

6 Counsel has looked at marked as Plaintiff's next.

7 THE COURT: All right.

8 MR. ANDREAS: And I think they should probably go -- I mean,

9 if you want me to do A, B, C, D, I'm happy to.

10 THE COURT: Is it one basic subject?

11 MR. ANDREAS: It's various documents.

12 THE COURT: Why don't we give them a separate number.

13 MR. ANDREAS: Okay.

14 Q. Now, when you came out -- and we heard this in your

15 testimony that I've read to the jury already -- when you came

16 out last year in the Wells case, you testified that you came out

17 to testify for Allen-Bradley because you had worked for the

18 company for 38 years, and they had treated you well. Do you

19 remember saying something like that?

20 A. Yes, they did. Right.

21 Q. And are you here today for the same reason?

22 A. Yes, sir, yeah.

23 Q. And I just want to know: Are you being compensated at all

24 for being here today, Mr. Maccani?

25 A. Yes, I am.

26 Q. How much?

27 A. Expenses and some per hour.

28 Q. How much per hour?

1 A. I believe it's a hundred dollars.

2 Q. And you understand that you're here as what's called a fact
3 witness in this case?

4 A. I've heard that term before, but --

5 Q. Well, you're here to talk about what you observed and so
6 forth, as you've discussed here with Mr. Keele?

7 A. Yes.

8 Q. Okay. You know that you weren't listed as an expert witness
9 by Mr. Keele or Rockwell in this case; correct?

10 MR. KEELE: Objection, relevance.

11 THE COURT: Sustained.

12 MR. ANDREAS: Q. You said, both in what I've read to the
13 jury and I believe yesterday and today, that Allen-Bradley began
14 its program to eliminate asbestos from its electrical control
15 products in about 1976; is that correct?

16 A. Began or that we completed it in '76?

17 Q. Wasn't it '77 that you actually completed it?

18 A. Yes, okay. It could have been '77, yes.

19 We were -- in '76, we were very close to completion, I
20 think, yes.

21 Q. And I don't --

22 A. '77, yeah, it could have been.

23 Q. And I don't mean this to be a memory test. We do have your
24 testimony here. But just let me read you just a quick segment
25 so we get this straight.

26 This is from Page 1243 of Exhibit 74, Judge, read to the
27 jury, Mr. Maccani's testimony, in the Wells trial. This is at
28 Line 17:

1 "Q. And did your project team have a schedule by
2 which you wanted to have all plastic parts with
3 asbestos replaced with plastic parts made from
4 molding compounds that were asbestos-free?

5 "A. Yes. We were targeting 1977 for that
6 replacement.

7 "Q. And did you meet that schedule?

8 "A. And we met that schedule, yes."

9 Does that refresh your recollection?

10 A. Yes.

11 Q. Okay. So from that, I understand -- and I want to be clear
12 about this -- that if anybody was working with an Allen-Bradley
13 electrical product that had been manufactured after 1977, no
14 asbestos?

15 A. No, that's not true. That's not completely true.

16 There were some parts I mentioned that -- the Rostone
17 crossbar -- that extended past that date.

18 Q. Okay. Do you remember which parts those were or which
19 products those were?

20 A. Could you clarify that?

21 Q. Yeah. Let me just grab something here.

22 Well --

23 THE COURT: Does that have an exhibit number?

24 MR. ANDREAS: It is an exhibit, and I'll refer to it, if
25 necessary.

26 THE COURT: All right.

27 MR. ANDREAS: Q. Mr. Maccani, the Bulletin 500 you
28 mentioned --

1 A. Right.

2 Q. -- '77, asbestos out of that?

3 A. No.

4 Q. Okay. So it was in the crossbar?

5 A. It was in the crossbar.

6 Q. But it was out of everything else in the Bulletin 500 by

7 that point?

8 A. The Bulletin 500.

9 Q. So prior to 1977, if somebody got a Bulletin 500,

10 Allen-Bradley Bulletin 500 motor starter, it would have more

11 parts in it that contained asbestos than after 1977; would that

12 be fair?

13 A. Yes.

14 Q. Now, I want to be clear about this. You worked for

15 Allen-Bradley; is that correct?

16 A. At the present time I'm retired from Allen-Bradley.

17 Q. No. I said you worked for, in the past?

18 A. Yes, I did.

19 Q. You retired in 1992?

20 A. Yes.

21 Q. And so from 1954 to 1992, you worked for Allen-Bradley?

22 A. Correct.

23 Q. And I think we've heard that Rockwell purchased

24 Allen-Bradley about 1985; does that sound about right?

25 A. About right, yeah. Dates like that, yeah.

26 Q. Again, not a memory test. Best recollection about that

27 time?

28 A. Um-hum, yes.

1 Q. And prior to that, Allen-Bradley had been operating in -- I
2 won't say "operating" -- but had owned Rostone for some period
3 of time; correct?

4 A. There was a period of time, yes.

5 Q. And it was sometime in the '60s that Allen-Bradley actually
6 purchased Rostone; correct?

7 A. That's correct.

8 Q. And we know that Rostone, as you said, was in Lafayette,
9 Indiana; correct?

10 A. Correct.

11 Q. And Allen-Bradley was in Milwaukee, Wisconsin?

12 A. Correct.

13 Q. You worked in Milwaukee, Wisconsin, for Allen-Bradley;
14 correct?

15 A. Correct.

16 Q. You did not work for Rostone; correct?

17 A. That's correct.

18 Q. At no time in your career have you ever worked for Rostone?

19 A. That's correct.

20 Q. And so would you agree with me that, to the extent we've
21 heard from the person most knowledgeable produced for a
22 deposition in this case as to what Rostone was doing with their
23 materials, that would be the person better qualified than you to
24 talk about Rostone?

25 MR. KEELE: Objection, foundation, speculation.

26 THE COURT: Overruled.

27 You may answer the question, if you can.

28 THE WITNESS: I'm not familiar with who you're talking --

1 who you're referring to.

2 MR. ANDREAS: Q. I want you to assume that we heard it in a

3 deposition from an individual named Charles Germain who was

4 produced in this case for a deposition to my office and

5 represented to be the person most knowledgeable for Rostone.

6 Okay? Do you have that in mind?

7 A. Yes.

8 Q. He reviewed all the Rostone documents, et cetera, et cetera.

9 Would you agree that that person would be more knowledgeable

10 about Rostone than you would be?

11 MR. KEELE: Objection, foundation, speculation, improper use

12 of hypothetical.

13 THE COURT: Sustained, sustained.

14 MR. ANDREAS: Q. Do you know Charles Germain?

15 A. I know of him.

16 Q. Now, if I'm understanding you correctly, when you got there

17 in 1954 at Allen-Bradley, Rostone was a major supplier of molded

18 asbestos-containing parts to Allen-Bradley; correct?

19 A. I don't know that.

20 Q. You didn't know that when you got there in '54?

21 A. That's correct.

22 Q. Sometime after that, you realized that they were?

23 A. That's correct.

24 Q. Okay. And that situation continued from whenever it was

25 that you found out all the way up through the time period we

26 just discussed, when you, at Allen-Bradley, were attempting to

27 do this replacement in that '76-'77 time period?

28 A. Yes.

1 Q. And even after that, Rostone continued to be a supplier of
2 the crossbar, for instance, for the Bulletin 500 Series and
3 Series K; correct?

4 A. That's correct.

5 Q. And those were the asbestos-containing parts that remained
6 in those items; correct?

7 A. No, not in the Series K.

8 Q. Okay, just the Bulletin 500?

9 A. Just the Bulletin 500.

10 MR. ANDREAS: Now, there is a document, Your Honor, that was
11 previously marked as Exhibit 84 and moved into evidence.

12 Mr. Keele indicated yesterday that he doesn't --

13 THE COURT: That's fine.

14 MR. ANDREAS: -- object to it.

15 So is 84 in evidence?

16 May I approach?

17 THE COURT: You may.

18 And without objection, Exhibit 84 will go into evidence.

19 MR. ANDREAS: Thank you.

20 (Plaintiff's Exhibit 84 marked for
21 identification)

22 MR. ANDREAS: Q. Sir, showing you Exhibit 84, do you
23 recognize that document?

24 A. No. I've never seen it before. I recognize the form.

25 Q. Right. It's, again, an interdepartment letter,
26 Allen-Bradley Company at the bottom; correct?

27 A. That's correct.

28 Q. And the subject is Rostone parts?

1 A. That's correct.

2 Q. It has a 6/11/75 date on it; correct?

3 A. That's correct.

4 Q. And do you know who -- it says from Jim Crangle,

5 C-R-A-N-G-L-E. Do you know who he is?

6 A. Yes.

7 Q. Who was he?

8 A. He was a purchasing agent.

9 Q. And then it's to Jim Stiles, S-T-I-L-E-S. Do you know who

10 Mr. Stiles is?

11 A. I believe he was in one of the manufacturing groups.

12 Q. And I don't know if there is any other names on here. There

13 is a Leonard Waraks, W-A-R-A-K-S. Do you know him?

14 A. No, I don't.

15 Q. And it appears that it was received from Anderson. Do you

16 know who that might be?

17 A. Not without a first name.

18 Q. Common name; right?

19 A. Common name.

20 Q. There is a list on this, sir, of four columns,

21 single-spaced, of parts now purchased from Rostone Corporation

22 containing asbestos. Right?

23 A. That's correct.

24 Q. Do you want to estimate how many there are? Or I guess we

25 could just count. It would be easier; right?

26 A. I can estimate. 60, 70.

27 Q. 60, 70?

28 A. Um-hum.

1 Q. I wanted to understand something you said on direct.

2 To your knowledge, you were generally aware that Rostone had
3 some business outside of just supplying Allen-Bradley; correct?

4 A. That's correct.

5 Q. Presumably your general understanding is that there were
6 some other people in the industry; correct?

7 A. Yes, competitors.

8 Q. And just so I understand who the competitors were, to
9 begin -- that you listed for Mr. Keele, generally, in the
10 industry -- was Westinghouse?

11 A. Yes.

12 Q. Square D.?

13 A. Correct.

14 Q. And Cutler-Hammer?

15 A. Cutler-Hammer.

16 Q. And I think you said General Electric also, G.E.?

17 A. Yes.

18 THE COURT: We need to take our morning recess at some
19 point, Counsel. Would this be a good time?

20 MR. ANDREAS: This would be a fine time, Judge.

21 THE COURT: At this point, we'll take our morning recess
22 until 10:15.

23 Again, I want to remind you not to discuss this case amongst
24 yourselves or with anyone else. If anyone contacts you in any
25 way, I want to hear about it at 10:15.

26 You're excused until then, sir.

27 (Recess taken at 10:00 a.m.)

28 (Proceedings resumed at 10:15 a.m.)

1 THE COURT: Let the record reflect that all 12 jurors -- all
2 15 jurors are present, at this point, as well as counsel, the
3 parties.

4 At this point, we need to select -- to seat an alternate in
5 open court. We actually have a little bingo-type machine, but
6 we didn't need to use this.

7 THE CLERK: Marina Kimball.

8 THE COURT: You are now juror number six. You're free to
9 remain where you are, if you'd like, or you can move on up.

10 Okay, the witness was on the stand, being examined by
11 Mr. Andreas.

12 MR. ANDREAS: Q. I want to get the spelling right.
13 Robert...

14 A. Uh-huh, yes.

15 Q. M...

16 A. -- a-c-c-a-n-i.

17 Q. I'd like to mark this sheet plaintiff's next.

18 THE CLERK: I think 101.

19 MR. ANDREAS: It would be 101, yes. Thank you.

20 Over-the-century mark, here.

21 (Plaintiff's Exhibit 101 marked for

22 identification)

23 MR. ANDREAS: Q. Mr. Maccani, is it correct, sir, that you
24 have no way of knowing how many parts in Allen-Bradley products
25 historically contained asbestos?

26 A. That's correct.

27 Q. And would the reason for that be that you never -- "you"

28 being Allen-Bradley -- never asked your suppliers of molded

1 asbestos-containing parts which parts contained asbestos until
2 you began the program we discussed to eliminate asbestos in
3 about '76?

4 A. That would be one reason.

5 Q. Well, you would agree with me that you could have asked, and
6 known about, asbestos in parts, starting at the time you began
7 with Allen-Bradley in 1954, if you had asked the suppliers;
8 correct?

9 A. I'm not sure that the suppliers would have felt obligated to
10 tell us that. The formulations are typically trade secrets.

11 Q. Well, the fact of asbestos being in this material was a
12 generality, correct?

13 A. Yes.

14 Q. You're talking about the actual formulations. That's what
15 you're saying are proprietary?

16 A. Yes.

17 Q. As a matter of generalities, you could have asked your
18 suppliers, starting in 19 -- well, at least when you got there
19 in 1954 -- to tell you which of the products contained asbestos;
20 right?

21 A. We could have, yes. We saw no reason to.

22 Q. Well, I appreciate that; but you would agree with that
23 statement, right?

24 A. Yes.

25 Q. Now, as far as when Rostone stopped supplying
26 asbestos-containing molded parts, I want to get this very clear.
27 You've told us about, in Milwaukee, you had a production
28 facility; correct?

1 A. That's correct. Molding -- production molding facility.

2 Q. Production molding facility. What Allen-Bradley has done,

3 historically, it has bought molding compounds from outside

4 suppliers to use in the molding -- production molding facility

5 there in Milwaukee; correct?

6 A. Correct.

7 Q. That's the hot-molding process you went through with Mr.

8 Keele?

9 A. Yes.

10 Q. Allen-Bradley did not do any cold molding for production

11 purposes; correct?

12 A. That's correct.

13 Q. When you wanted to get cold-molded parts, you had go to

14 Rostone; correct?

15 A. Or other people that did this job, yes.

16 Q. Well, we'll talk about that in a minute. And as far as

17 competitors of Allen-Bradley, to the extent Rostone was

18 supplying them with similar materials and parts, you wouldn't

19 know about that; because that, again, would be proprietary

20 information; correct?

21 MR. KEELE: Objection, speculation.

22 THE COURT: Overruled. You may answer the question, if you

23 can.

24 THE WITNESS: I think I did know what they used, through

25 analysis and competitive analysis.

26 MR. ANDREAS: Q. What I want to do is read from your prior

27 testimony in the Wells case. Again, page 1290 in the

28 transcript, Exhibit 74. And this is asked -- this question was

1 asked, line 15:

2 "Q. So the way it was set up, the left-hand,
3 Allen-Bradley, wouldn't share information with the
4 right-hand on what's in these products?"

5 The "right hand," I'll represent, was Rostone. There was a
6 discussion with Mr. Purcell.

7 Do you remember that left-hand/right-hand? The answer that
8 you gave:

9 "A. You're correct, we did not share
10 information; because Rostone had, as their customers,
11 competitors to Allen-Bradley, such as Westinghouse,
12 General Electric, Cutler-Hammer. And they had to
13 have an agreement with their customers, other
14 customers, that they would not share proprietary
15 information with Allen-Bradley, excluding them. So
16 it was a business arrangement."

17 Q. Is that fair?

18 A. Yes.

19 Q. Okay. Getting back, now, to Allen-Bradley in the molding of
20 parts that they did in their production molding facility in
21 Milwaukee, the hot molding that you talked about, that process
22 was the one that you've described in the past, where you
23 employed this black art of throwing in a pinch of asbestos?

24 A. No, not our process. That process was back at the molding
25 material manufacturers.

26 Q. So they threw asbestos into the molding compound then sent
27 to you and used in the production molding facility?

28 A. That's correct. That asbestos had to be added there. We

1 could not add it later on. It wouldn't have been coated by the
2 polymers.

3 Q. We'll talk about that, in a minute. In order to mold some
4 parts, it's correct that Allen-Bradley went out and bought
5 molding compound from people like Durez and PLENCO and
6 Reichhold, you said?

7 A. Yes, uh-huh.

8 Q. Is it fair to say, to the extent -- when did you come to
9 this general knowledge there was this black art of adding
10 asbestos, or a pinch of asbestos, to the molding compound? Was
11 that in the 1970s, or did you know that before?

12 A. No. That was in the '70s, when we started to inquire of the
13 various suppliers if their compounds contained asbestos.

14 Q. You could have inquired about that black art going back to
15 the '50s or '40s, if you wanted to; correct?

16 A. Yes.

17 Q. Now, I want to get this clear. None of that stuff that you
18 bought from outside suppliers, PLENCO and Reichhold and those,
19 were used in the production molding facility in Allen-Bradley
20 was polyester molding material; correct?

21 A. That's correct.

22 Q. Polyester molding compound was the dough-like material that
23 you described for us?

24 A. That's correct.

25 Q. Allen-Bradley has never molded that material at their
26 production facility?

27 A. Not the dough molding type.

28 Q. Allen-Bradley has been using polyester molded parts in their

1 products for decades; correct?

2 A. That's correct.

3 Q. Predating the time you got there in '54?

4 MR. KEELE: Objection, speculation.

5 THE COURT: If you know.

6 THE WITNESS: No, they have not. To my knowledge, the

7 polyesters of Rostone type were not available back to -- prior

8 to 1954.

9 MR. ANDREAS: Q. All right. To about 1954 would be fair?

10 About that time?

11 A. I wouldn't speculate on when.

12 Q. In that time period?

13 A. Late '50s, possibly.

14 Q. I think you covered this, briefly; but Allen-Bradley, you

15 would agree, continued to use these polyester molded parts in

16 its products until the 1980s; correct?

17 A. These polyester...

18 Q. The polyester molded parts were used all the way up from

19 that time into the 1980s; correct?

20 MR. KEELE: Vague, overbroad.

21 THE COURT: Overruled. You may ask the question again.

22 THE WITNESS: Yes. We use polyester parts, to this day, in

23 our devices.

24 MR. ANDREAS: Q. So this goes up to the present time?

25 A. That's correct.

26 Q. But that polyester molded material no longer contains

27 asbestos?

28 A. That's correct.

1 Q. That was taken out sometime in the '80s; correct?

2 A. That's correct.

3 Q. You listed the parts, the plastic parts that you believe

4 contain asbestos. And I think it was in the motor starter, or

5 that list that you did.

6 A. No. I was just speaking of the motor starter contactor.

7 Q. The motor starter?

8 A. Right. Again, this motor starter, those are the parts that

9 contain asbestos. Yes, that I was shown.

10 Q. Let me just -- I want to write something up here. So

11 polyester molded parts. And, by the way, that's a cold-molding

12 process; correct?

13 A. No.

14 Q. It can be hot-molded, as well?

15 A. Polyesters, yes.

16 Q. So hot and cold, both?

17 A. I'm not sure polyesters were used in a cold-molding process.

18 Q. To the extent that Rostone made that material and made the

19 parts out of the polyester material, would you defer to Rostone

20 on that issue?

21 MR. KEELE: Objection, speculation; foundation. He said he

22 didn't know.

23 THE COURT: Sustained, as asked.

24 MR. ANDREAS: Q. To the extent we've heard from somebody

25 speaking for Rostone on that subject, would you defer to that

26 individual on their processes for molding parts?

27 MR. KEELE: The same objection.

28 THE COURT: Overruled, you may answer the question, if you

1 understand it.

2 THE WITNESS: Yes, I understand it. I... yes, I defer to a
3 qualified expert. To my knowledge, they did not.

4 MR. ANDREAS: Q. All right. But, certainly, to your
5 knowledge, they did hot-molding; right?

6 A. Yes.

7 Q. What we talked about -- or you talked about -- as far as
8 hot-molded, was it phenolics and melamines that you mentioned,
9 sir?

10 A. Two of the ones I mentioned, yes.

11 Q. That's the material we were discussing that Allen-Bradley
12 purchased, itself, and did not -- did all the various injection
13 compression molding you told us about in the Milwaukee facility?

14 A. Two of a number of materials, yes.

15 Q. Right. I'm just going to put here and abbreviate it,
16 Allen-Bradley, used -- is Milwaukee with two e's?

17 A. Yes, two e's.

18 JUROR NO. 12: I just don't understand... Is that --

19 THE COURT: You'll have to wright it down.

20 MR. ANDREAS: Q. The polyester molding compounds that we're
21 talking about, would you agree with me that Rostone was the
22 overwhelming major supplier of cold-molded polyester parts for
23 Allen-Bradley, major supplier of polyester molded parts for
24 Allen-Bradley from the '50s through the -- well, I'll take it
25 all the way to the present?

26 A. No.

27 MR. KEELE: Vague, overbroad.

28 MR. ANDREAS: Q. How about from the '50s to the 80s, that

1 time period? Would you agree Rostone was the overwhelming major
2 supplier?

3 THE COURT: He doesn't have to agree. Just ask him if he
4 agrees.

5 MR. ANDREAS: Q. Would you agree?

6 A. Yes. The reason I -- in the '70s and '80s, we were looking
7 for alternate sources for a lot of those parts. I'm not sure
8 what the predominance was, one way or another.

9 Q. That's when you went to look with companies, like Glastic
10 and Premix, maybe about that time period?

11 A. No, no. That -- to my knowledge, they weren't candidates
12 for cold-molded.

13 Q. All right.

14 Many of the phenolic compounds contained asbestos; isn't
15 that correct?

16 A. A number of them did, yes.

17 Q. Well, many of them did; didn't they?

18 MR. KEELE: Objection, argumentative.

19 THE COURT: Sustained.

20 MR. ANDREAS: Q. Well, haven't you testified in the past
21 that many of the phenolic compounds contained asbestos?

22 A. I may have used that term, yes. I won't quibble about the
23 number, okay.

24 Q. And again, not a memory test here.

25 In the Wells case, on Page 1224, Line 21, question --

26 MR. KEELE: I'm going to object to the further reading as
27 cumulative, Your Honor. This has been read already.

28 THE COURT: Was that already read?

1 MR. ANDREAS: Well, and I'm trying to refresh his
2 recollection.

3 THE COURT: Why don't you show it to him.

4 MR. ANDREAS: Okay. If I can approach?

5 THE COURT: You may.

6 MR. ANDREAS: Q. Showing you Exhibit 74, sir, and I've
7 highlighted the section on Page 1224. Read it to yourself,
8 please.

9 A. Yes.

10 Q. Does that refresh your recollection --

11 A. Yes.

12 Q. -- that you said "many"?

13 A. Yes.

14 Q. Now, Allen-Bradley had asbestos in its parts, in large
15 measure, because it helped to prevent wear; isn't that correct?

16 A. In the crossbar, that's true.

17 Q. And the crossbar is the one that you had asbestos in all the
18 way until the '80s; right?

19 A. That's correct.

20 Q. And that's the thing that you showed us on the exemplar that
21 moves; correct?

22 A. Yes. That's the moving part, right.

23 Q. And Allen-Bradley tended to put asbestos-containing parts in
24 locations in its products where there was going to be the most
25 wear; isn't that fair?

26 A. In that specific device, the Bulletin 500, that's the reason
27 for it, yes.

28 Q. Well, just generally, was that the reason why Allen-Bradley

1 put asbestos-containing parts in its products, was it put it in
2 locations where it would tend to get the most wear?

3 MR. KEELE: Objection, vague as to "parts" and "products."

4 THE COURT: You may answer the question, if you understand
5 it.

6 THE WITNESS: I understand it, and I disagree.

7 The only part that we used -- specifically used asbestos in
8 for wear was the crossbar in the Bulletin 500. The asbestos in
9 the other Allen-Bradley compounds were put in not to our
10 knowledge, but by the material manufacturers, for a variety of
11 reasons.

12 MR. ANDREAS: Q. Sure, sure.

13 But it would be used in parts that would be the focal
14 component part where you're expecting the most wear; correct,
15 the asbestos?

16 A. No. I disagree with you. Only in the Bulletin 500 was it
17 used in the parts because of the wear. We did not use it --
18 make it -- or inquire in asbestos-containing compounds in other
19 devices than the Bulletin 500 for wear.

20 For instance, in the Series K, we had a crossbar that had a
21 wear component that did not contain any sizable amount of
22 asbestos.

23 Q. And maybe I'm just misunderstanding -- I want to clear this
24 up -- from your prior testimony. On Page 1301 in the Wells
25 transcript, Line 27:

26 "Q. Well, I want to know why Allen-Bradley had
27 asbestos in many of their components.

28 "A. Well, there are two reasons. One, in the

1 phenolic compounds, like I say, we -- we had -- we
2 would see no reason except that it was industry-wide
3 to add a small amount of asbestos to the materials.
4 In the polyesters, that was a formulation made by
5 Rostone to satisfy some wear requirements that we had
6 on our Bulletin 500 design."

7 A. That's correct.

8 Q. Let me finish.

9 "Q. It made them last longer than components
10 without asbestos; right?

11 "A. In the crossbar, yes, it had.

12 "Q. So the place you'd have the asbestos would
13 be on some focal component part that you want to
14 enhance the wearability with because they're wearing;
15 right?

16 "A. That's correct, because they had less wear.

17 "Q. Right. So you put the asbestos where there
18 is wear so you don't need to put the asbestos where
19 there is nothing going on; right?

20 "A. No, that's not right.

21 "Q. You put asbestos there, too?

22 "A. Sure, you could. I'm not Allen-Bradley, but
23 I can see where you would, in the industry, you put
24 it there because it was high strength and good
25 high-temperature properties also."

26 A. Again, speaking for the industry, yes.

27 Now, is your question relative to Allen-Bradley or the
28 industry?

1 Q. Well, I'll ask you that. Did Allen-Bradley use asbestos in
2 other component parts made out of phenolics and melamines and so
3 forth?

4 A. Yes, we did. But we did not require it for any wear
5 application. I guess I'm just trying --

6 Q. I think I got it now.

7 A. Okay.

8 Q. I think you were clear there that it was also used in
9 applications where there wasn't wear; correct?

10 A. Yes.

11 MR. KEELE: Your Honor, if I could ask that the witness be
12 allowed to complete an answer?

13 MR. ANDREAS: Q. Is there something that you needed to add
14 to that, sir?

15 A. Not at this time, no.

16 Q. Now, as far as wear, Mr. Maccani, these molded parts
17 containing asbestos, as you described the crossbar, for
18 instance, would wear, eventually; correct?

19 A. Yes, that's correct.

20 Q. Let me just ask this at this point. Did Allen-Bradley
21 design and construct and manufacture its products to last
22 forever?

23 A. No.

24 Q. It wouldn't be a very successful business if that were the
25 case; right?

26 A. That's correct.

27 Q. So you'd have to expect the parts are going to wear out or
28 break down and need to be replaced and updated and so forth;

1 correct?

2 A. That's correct.

3 Q. Now, Allen-Bradley conducted what are called life tests on
4 its products to determine wear at Milwaukee, Wisconsin; correct?

5 MR. KEELE: Objection, beyond the scope of direct.

6 THE COURT: Part of his deposition, in the other case, was
7 read as part of your reading dealing with a lot of this. So, I
8 mean, some of this is going to be cumulative.

9 MR. ANDREAS: I don't intend to spend -- I'm just touching
10 on it briefly.

11 THE COURT: The objection is overruled. But you are going
12 to get into the cumulative range really fast.

13 MR. ANDREAS: Q. Is that correct?

14 A. Repeat the whole question, please.

15 Q. Sure. Allen-Bradley conducted what are called life tests on
16 its products to determine wear at Milwaukee; correct?

17 A. That's correct.

18 Q. Sure, all right. And would it be correct the life tests
19 were designed to gauge wear over 20 to 25 years in the field; is
20 that fair?

21 MR. KEELE: Objection, foundation.

22 THE COURT: Overruled.

23 You may answer the question.

24 THE WITNESS: The life tests were tailored to a certain
25 number of operations, which you could project out to some
26 intervals. But typically, it was the number of operations,
27 number of cycles.

28 MR. ANDREAS: Q. Sure. But they were designed to predict

1 20 to 25 years life in your products; correct?

2 A. Many of them were predicted to be 20-year-life, um-hum.

3 Q. Some less, some more; fair?

4 A. Right.

5 Q. And in doing the life tests, Allen-Bradley would cycle the

6 products for ten to 12 million cycles; isn't that correct?

7 A. That's correct. It varied from device to device. Different

8 sizes were less, and smaller sizes were more.

9 Q. And was it recommended in the industry that you could do it

10 up to 20 million cycles?

11 MR. KEELE: Objection, beyond the scope of direct and beyond

12 the scope of the testimony read.

13 THE COURT: Sustained, as asked.

14 MR. ANDREAS: May I approach?

15 THE COURT: You may.

16 MR. ANDREAS: Thank you.

17 Q. Sir, I'm going to show you what's been marked as Exhibit 97,

18 a two-page document bearing the letterhead of Rostone. Do you

19 see that?

20 A. Yes, I do.

21 Q. My question to you is: First of all, it's addressed to a

22 fella named Gerd, G-E-R-D, Boysen, B-O-Y-S-E-N, at Allen-Bradley

23 Company; is that correct?

24 A. Yes, it is.

25 Q. Do you know who Mr. Boysen was or is?

26 A. Yes, I do.

27 Q. Who is he?

28 A. He was the manager of our electrical mechanical products.

1 Q. And the date of this letter is September 16, 1980; is that
2 correct?

3 A. That is correct.

4 Q. And the subject is the replacement program; is that correct?

5 A. That's correct.

6 Q. That's the program you were involved with?

7 A. No, it is not. This is the 3550 LWR Replacement Program,
8 which was a program that Rostone had developed to replace.

9 Q. All right. Do you see where it says 20 million life
10 cycles --

11 MR. KEELE: Objection, Your Honor, hearsay, lack of
12 foundation.

13 THE COURT: Do you want to come to the side bar?

14 MR. ANDREAS: Sure.

15 (Side bar conference heard, not reported.)

16 MR. ANDREAS: May I proceed?

17 THE COURT: You may.

18 MR. ANDREAS: Thank you.

19 Q. Mr. Maccani, showing you again Exhibit 97, you mentioned
20 that you're, well, at least familiar with the 3550 LWR program?

21 A. Yes, I am.

22 Q. What is the 3550 LWR, first of all?

23 A. That is the polyester material made by Rostone, and it
24 contained asbestos.

25 Q. Okay.

26 A. That's the material that the crossbar was molded out of.

27 Q. And was this part of this overall replacement program that
28 you discussed, where it started in '76, almost all of it was out

1 by '77, and then this crossbar, for instance, was one that was
2 still being worked on?

3 MR. KEELE: Objection, misstates his testimony.

4 THE COURT: Overruled.

5 You may answer the question, if you can.

6 THE WITNESS: No, it was not part of our program that I had
7 responsibility for.

8 MR. ANDREAS: Q. This is a separate replacement program?

9 A. That is a separate program, yes.

10 Q. And Mr. Boysen was in charge of that?

11 A. Yes. He had the ultimate responsibility.

12 Q. It's from a gentleman by the name of Kenneth Johansen; is
13 that correct?

14 A. Yes.

15 Q. Do you know him?

16 A. Yes, I do.

17 Q. Who was he?

18 A. He was the technical person responsible for any Rostone
19 materials. I'm not sure what his actual title was.

20 Q. And it's your testimony that you had no involvement with
21 this project?

22 A. With that project? We had involvement -- this is one of the
23 things where we shared technologies with Rostone on an informal
24 basis, again, because we were not privy to their actual
25 formulation, just that it did contain asbestos.

26 Milwaukee had a parallel program to evaluate different
27 enforcement materials which we performed in Milwaukee, using the
28 same process that Rostone used. We would share our information

1 on the success or failure of these different components with

2 Rostone.

3 Q. I see. Now, with respect to this particular exhibit, 97,

4 this letter, do you recall receiving this letter?

5 A. No, I do not.

6 Q. Would you tell me, on the second page, under the

7 signature -- or where Mr. Johansen's name is, who is the cc to?

8 A. Myself. Yeah, I received it. I don't recall it.

9 Q. Well, when you received things cc to you, you typically

10 reviewed them; correct?

11 A. Yes.

12 Q. That was your practice?

13 A. Yes.

14 Q. All right. So would you agree that this is a letter from

15 Rostone that was addressed to Mr. Boysen in 1980 regarding the

16 3550 LWR material that was cc'd to you?

17 A. Yes. I accept that.

18 Q. Now, do you see in here where it says:

19 "Our sole goal with these samples is to see if we

20 could get a material with sufficient physical

21 integrity to pass the 20 million life cycle

22 requirement"?

23 MR. KEELE: Objection, hearsay.

24 THE COURT: Overruled at this point.

25 MR. KEELE: Pardon me?

26 THE COURT: Overruled. This witness received the letter.

27 MR. ANDREAS: Q. Do you see that?

28 A. Yes, I see that.

1 Q. So would you agree with me that there were life cycle

2 tests --

3 THE COURT: He doesn't have to agree with you, Counsel.

4 MR. ANDREAS: I'm sorry.

5 Q. Would it be fair to say that there were life cycle tests

6 that went up to 20 million cycles?

7 MR. KEELE: Objection, foundation, speculation.

8 THE COURT: Overruled.

9 You may answer, if you know.

10 THE WITNESS: Yes, I would agree with that.

11 MR. ANDREAS: Q. Now, have you reviewed, sir, any of the

12 patents regarding mineral-filled thermosetting molding compounds

13 that have been --

14 A. Some, I have.

15 Q. Would you agree that abrasive surface wear causes

16 dimensional changes and produces a fine dust?

17 A. Yes, I would agree with that.

18 Q. Now, Mr. Maccani, when you were deposed prior to the

19 Perry Wells case last year, 2002, you stated that the arc

20 chutes -- or arc shield -- we've heard it described several

21 ways. Is that synonymous, basically?

22 A. Yes, basically.

23 Q. Those parts on Allen-Bradley products contained asbestos;

24 you said that in your deposition prior to the Wells case. Do

25 you remember that?

26 A. Yes, I did. And I also corrected that.

27 Q. Right. I'm getting to that right now.

28 A. Okay.

1 Q. And when you came to court and testified before a jury for
2 Mr. Keele, you said: You know, I was wrong, and I want to
3 change my deposition now, and you said that the arc chutes never
4 had any asbestos in them. Correct?

5 A. That's correct.

6 Q. And that was after deposition, and you went back, at the
7 request of Allen-Bradley, Rockwell attorneys, took a look at
8 that subject again, and found some information again that
9 changed your mind?

10 MR. KEELE: Objection, cumulative.

11 THE COURT: It is cumulative. You read that portion here.
12 Unless there is some new material here, I'd like to go on.

13 (Discussion off the record between counsel.)

14 MR. ANDREAS: Q. So we understand this, then, the
15 deposition in the Wells case, it had these arc shield materials,
16 had asbestos. When you came to trial, no asbestos; correct?

17 A. Yes. But, in all fairness, I have to say, during the
18 deposition we were going back and forth on various devices, and
19 it was -- became confusing at the time.

20 Once I read the written transcript, I went back, on my own,
21 to our engineering files; researched that; found that, in fact,
22 they did not contain.

23 Q. That's across the board, all the products that had arc
24 shield/arc chutes on them?

25 A. No. That was in these Series K devices that I was referring
26 to.

27 Q. Okay. And have you been presented a stipulation that -- or
28 seen a stipulation that's been entered in the trial about the

1 arc chutes?

2 A. No, I have not.

3 Q. Mr. Keele didn't show it to you?

4 A. No, he has not.

5 Q. Let me read it to you.

6 THE COURT: Wait a minute. If this is something stipulated,
7 and it's not disputed, why is this witness being questioned?

8 MR. ANDREAS: Let me ask it a different way.

9 Q. If Allen-Bradley has now said that arc chutes did contain
10 asbestos, is that contrary to your view?

11 MR. KEELE: Objection vague, misstates --

12 THE COURT: Sustained.

13 MR. ANDREAS: Q. Are you familiar with Bulletin 7 series,
14 or 700 series?

15 A. Not too familiar.

16 Q. When did that come out, that series? Approximately.

17 A. Approximately, I don't know the -- I'm not up on all our
18 bulletin numbers. The Series A contactors may have been
19 Bulletin 700 or series there, which would have been in the '50s.
20 Later on, the Series K, also in the Bulletin 700 designation,
21 that would have been in the '60s.

22 Q. Did the Bulletin 700 series products contain asbestos in the
23 arc chutes and arc shields?

24 A. Not to my knowledge.

25 Q. The Allen-Bradley was the number-one manufacturer and
26 supplier of electrical products of the type we've been
27 discussing; correct?

28 MR. KEELE: Vague as to time.

1 MR. ANDREAS: I'll reframe it.

2 Q. When you started there in 1954, it was number one; wasn't
3 it?

4 A. I'm not sure if -- possibly. Again, my credentials are --
5 in '54 when I started, for five or ten years, I was more
6 involved with the electrical division, electronics division.

7 It was only after we established a plastics laboratory that
8 I became involved with the industrial control products which
9 made the contactors.

10 Q. So I understand this, then, '54 you get there, mostly in the
11 electronics division, which is the --

12 A. Resistors.

13 Q. -- resistors we looked at, first five, ten years?

14 A. Yeah.

15 Q. Getting up into the '60s, fair?

16 A. Yes.

17 Q. To the extent we're talking, in this case, about industrial
18 products of the type of contactors and starters, all of that,
19 that's not something that you would have had involvement with,
20 or knowledge of, until you got out of the resistor --

21 A. Prior to the '60s, I'd say. Right.

22 Q. So as far as some of the questions I asked earlier about
23 using Rostone, for instance, materials in those industrial
24 products in the '50s or '40s, that's not something you'd know
25 about?

26 A. Not unless it came up as far as replacement material. Then
27 I would have had to go back, research specific items. But
28 generality -- generally, no, I did not have much contact with

1 industrial control products.

2 Q. To the extent that we want to know how far back Rostone was

3 supplying that material to Allen-Bradley for its industrial

4 products, you only really go back to the early '60s on that,

5 with knowledge; correct?

6 A. Yes.

7 Q. At some point later in your career, you became more aware of

8 Allen-Bradley's position with the overall industry, fair?

9 A. Yes.

10 Q. You were aware that Allen-Bradley was number one?

11 A. That's correct.

12 Q. For many years?

13 A. Yes.

14 Q. I think you said, on direct with Mr. Keele, yesterday, that

15 the industrial-type products that you make include products that

16 you might find in large buildings with lighting systems, so

17 forth?

18 A. That's correct.

19 Q. Like maybe this courthouse?

20 A. Possibly.

21 Q. Large buildings. Maybe college campuses, things like that?

22 A. Could be. Possible.

23 Q. And dormitory buildings, things like that?

24 MR. KEELE: Objection, speculation.

25 THE COURT: I mean, where is this going now?

26 MR. ANDREAS: Do you want me to tell you, judge, or just

27 ask....

28 THE COURT: Large buildings or -- large buildings, you have

1 10 million large buildings. Where is this going?

2 MR. ANDREAS: I'm stopping after this one.

3 Q. Dormitory buildings?

4 A. All I can say, they were used to control lighting systems,

5 and they were not used by consumers. They were used by

6 commercial or industrial end users.

7 Q. Institutional-type places?

8 A. Possibly.

9 Q. Now, on the resistors -- very quickly, this is Exhibit 5025

10 that we had up on the gismo, here.

11 You told us what Allen-Bradley made, or formulated, was the

12 insulation on the outside of the resistors, the material --

13 plastic material that went on the outside?

14 A. Now, when you say "formulated," Allen-Bradley formulated all

15 the materials in there. We purchased a lot of the materials,

16 the ingredients, for those materials from outside vendors. We

17 manufactured our own polymer for insulation on the outside.

18 Q. So --

19 A. But we --

20 Q. Go ahead.

21 A. We made all of the materials. We processed and compounded

22 all of the materials.

23 Q. All right. But you bought stuff from outside, as well?

24 A. Yes, we did.

25 Q. Would that include cold-molded material?

26 A. No, that didn't. These were just ingredients in there.

27 Again, I described before that a molding compound comprises a

28 polymer filler or reinforcement pigments, lubricants -- in this

1 case, conductors. So those are the ingredients I'm talking

2 about.

3 Q. Did Rostone -- excuse me. Did Rostone, to your knowledge,

4 manufacture a cold-molded compound that contained asbestos which

5 was recommended for use in molding capacitors and resistors?

6 A. No, they did not.

7 Q. Rostone did not?

8 A. Not to my knowledge.

9 Q. Do you know why Allen-Bradley purchased Rostone in the

10 1960s?

11 A. No.

12 Q. Now, on the issue of thoroughly wetting fibers, do you

13 remember Mr. Purcell examining you, back in the Wells case,

14 about corn dogs and weenies? Do you remember that?

15 A. I think I remember that humorous comparison, analogy.

16 Q. All right. So we understand, the plastic material you're

17 talking about the compounding process. You say you want to wet

18 the fibers correct?

19 A. That's correct.

20 Q. When you say "fibers," are you talking about individual

21 fibers or talking about the fiber bundles?

22 A. The optimum performance was when you could coat the

23 individual fibers in the composition.

24 Q. When we talked about an asbestos fiber, Mr. Maccani, are we

25 talking about a single asbestos fiber or a bundle of fibers? Do

26 you know?

27 A. No, I don't know. Again, we never --

28 THE COURT: Excuse me, counsel. If you're going to speak,

1 I'm going to have to ask you to move. You're sitting right next
2 to a juror; they need pay attention.

3 If you're going to be speaking to anybody, please move over.

4 Thank you.

5 THE WITNESS: I'm speaking of wetting the fibers. I guess
6 I'm going back to our experiences with other types of fibers
7 than asbestos, but the same would hold true.

8 MR. ANDREAS: Q. I guess my question was really just,
9 you're not an expert on asbestos fibers; are you, sir.

10 A. No, I am not.

11 MR. ANDREAS: May I approach?

12 THE COURT: You may.

13 MR. ANDREAS: Thank you.

14 Q. Showing you -- if you want to take a minute, look through
15 Plaintiff's Exhibits 58 through 65. Do you recognize what's
16 depicted in Exhibits 58 through 65, Mr. Maccani?

17 A. If you're saying I can identify what type of fibers those
18 are, no.

19 Q. You certainly see fibers --

20 A. Some fibers.

21 Q. -- protruding out of something?

22 A. Correct.

23 Q. You'd agree, those aren't locked in a matrix?

24 MR. KEELE: Objection, no foundation.

25 THE COURT: Sustained.

26 MR. ANDREAS: Q. While I'm here, Exhibit 94, you mentioned
27 some conferences that you attended for the plastics industry; is
28 that correct?

1 A. Yes.

2 Q. In the '70s?

3 A. Yes.

4 Q. And is there something called the Reinforced Plastics

5 Composites Institute Society of Plastics Industry, Incorporated?

6 A. Yes.

7 Q. Did you attend their meeting?

8 A. Not all of them. They focused primarily on polyester

9 material. And at that time, we were not a manufacturer of

10 polyester materials, or even a molder of polyester materials.

11 Q. That was Rostone?

12 A. That was Rostone. But I did have occasion to attend some of

13 the seminars.

14 Q. You know, they publish papers and abstracts, so forth, based

15 on presentations, research?

16 A. That's correct.

17 Q. Now, do you consider them to be a reliable source of

18 information in your field on plastics, so forth?

19 A. Like any source, it depends on authors. Yes, generally well

20 accepted.

21 Q. Let me show you Exhibit 94. This is from the 31st Annual

22 Technical Conference. The date is covered over a little bit,

23 here. 1976 - Reinforced Plastics Composites Institute, The

24 Society of Plastics Industry.

25 And it's entitled Injection Molding of Fiber Reinforced

26 Polyester for Electrical Application by D. Douglas Ward.

27 First of all, do you know Mr. Ward?

28 A. Yes, I do.

1 Q. He's identified here at the bottom as the Chief Engineer of
2 the Rostone Corporation in Lafayette, Indiana?

3 A. Correct.

4 Q. Is that correct?

5 A. That's correct.

6 MR. KEELE: I'm sorry, Your Honor. Was there an exhibit
7 number?

8 MR. ANDREAS: Ninety-four.

9 MR. KEELE: Thank you.

10 MR. ANDREAS: Q. Was Mr. Ward an experienced person in his
11 field?

12 A. His responsibility involved a lot of that, yes.

13 Q. Exhibit 95 is a document, appears to be -- well, let me have
14 you take a look at it. Do you recognize it?

15 A. Yes, I do.

16 Q. How do you recognize it?

17 A. I wrote it, basically.

18 Q. Interdepartment letter dated November 2, 1979?

19 A. '79.

20 Q. And it's from the Plastics Material Laboratory, R. Maccani

21 -- that's you -- to Mr. Boysen and Mr. Franklin -- or is that

22 Ms. Franklin?

23 A. Mister

24 Q. Tell me if I -- just, why don't you identify the names?

25 A. Ken Johansen was the Rostone chemist.

26 Q. What was this?

27 A. Ed Michalak, vice president of our technical division.

28 Q. And who is this one?

1 A. That was Gene Plonka, who is -- again, the time frame -- he
2 was the manager of our molding Department at Allen-Bradley
3 Milwaukee; then he moved to Rostone, at one point in time,
4 became their manufacturing manager.

5 Q. All right. So there was some of this back and forth between
6 employees between Allen-Bradley and Rostone, as far as jumping
7 ship, going over there?

8 A. Like in any other company, yes.

9 Q. Copy -- I think copied to some people?

10 A. Mike Mejac was our chief chemist; Ken Paape was the director
11 of engineering; and Doug Ward is Rostone.

12 Q. Doug Ward is the fellow we just talked about?

13 A. Yes.

14 Q. All right. And what was the subject of this? It says

15 "Rostone LWR molding," doesn't it?

16 A. Yes, that's the title.

17 Q. Do you remember what this was about, generally?

18 A. No. Again that goes back to 20 some years. I haven't seen
19 that document for 20 years. I'd have to review it.

20 Q. All right. Exhibit 96 is another document I'd like you to
21 take a look at, sir, and tell me if you are familiar with it.

22 A. Yes. It's another report that I wrote, approximately to the
23 same people.

24 Q. And it's dated what?

25 A. 1979, November of '79.

26 Q. November 14?

27 A. 14.

28 Q. And what's the subject of that one?

1 A. The title is, "Technical Supplement to Rostone LWR Report."

2 Q. And you authored this?

3 A. I authored it.

4 Q. And it's on Allen-Bradley interoffice stationery?

5 A. Yes.

6 Q. Exhibit 98, let me hand you this document. It's actually
7 seven pages.

8 Having reviewed that, does it look familiar to you?

9 A. No.

10 Q. Do you know who Mr. Clint Smith is or was?

11 A. Yes. He was the chief chemist there at Rostone that
12 followed Ken Johansen, his job.

13 Q. Okay. So he worked at Rostone?

14 A. At Rostone.

15 Q. 1982 sound about right?

16 A. Yes.

17 Q. Did you interact with Mr. Smith?

18 A. Yes, I did.

19 Q. And Mr. Smith was responsible for dealing with, for
20 instance, raw material suppliers?

21 A. Yes. He was responsible for the formulations, Rostone
22 formulations.

23 Q. And have you heard of Johns-Manville?

24 A. I've heard of them.

25 Q. How?

26 A. I just know that they are a supplier of different types of
27 materials, reinforcements, asbestos being one of them.

28 Q. Were you ever -- did you ever discuss with Mr. Smith how

1 much raw asbestos, in 1980 -- well, from '78 to '81, Rostone was
2 receiving from, for instance, Johns-Manville?

3 A. No. I have no recollection of that.

4 Q. Do you know whether they were using tons of asbestos or not?

5 MR. KEELE: Objection, foundation.

6 THE COURT: Sustained.

7 MR. ANDREAS: Q. Exhibit 99, sir, let me hand you that and
8 ask you if you recognize it.

9 A. Yes.

10 Q. How?

11 A. It's an interdepartment letter. It's addressed to me. It's
12 from Clint Smith.

13 Q. And you received and read that?

14 A. Back then, in '82?

15 Q. I don't expect you to remember the exact contents.

16 The date was what?

17 A. February 22nd, 1982.

18 Q. And it's the same Clint Smith we were just talking about at
19 Rostone?

20 A. That's correct.

21 Q. And the subject is: "Estimated Timetable for LWR and AWR
22 Plus Program." Correct?

23 A. That's correct.

24 Q. What were those programs?

25 A. The LWR is the asbestos-containing Rostone material.

26 The AWR Plus Program was the replacement material, which
27 would be asbestos-free.

28 Q. Right.

1 A. So WR indicates wear-resistant.

2 Q. So the WR is specifically dealing with wear-resistant?

3 A. Correct.

4 Q. And you speak about those issues in these types of

5 documents; right?

6 A. Right.

7 Q. Exhibit 100, sir, let me hand you that and ask you if you

8 recognize that document.

9 A. Again, it's an update report, yes, from Clint Smith, at

10 Rostone.

11 Q. Do you see your name there on the cc?

12 A. Yes, I do.

13 Q. Based on your practice at the company, you would have

14 received and reviewed this?

15 A. Yes, I would have.

16 Q. And it's dated what?

17 A. It says March 4th, 1982.

18 MR. ANDREAS: Your Honor, I would move Plaintiff's 95, 96,

19 99 and 100 into evidence. I'll reserve on 98 for further

20 discussion.

21 THE COURT: Any objection?

22 MR. KEELE: No objection.

23 THE COURT: All right. Without objection, Exhibit 95, 96,

24 99 and 100 go in evidence.

25 (Plaintiff's Exhibits 95, 96, 99 & 100

26 received in evidence)

27 MR. ANDREAS: Q. Did the Series 700, sir, did you say that

28 was a motor starter or a contactor?

1 A. I don't know. It could be either.

2 Q. It could be the combination thing that we looked at?

3 A. Yes.

4 Q. You said that if it doesn't have the overload relay --

5 A. It's a contactor.

6 Q. We can't talk over each other.

7 When you said it has an overload relay on it with the

8 contactor, then it's a starter, a motor starter?

9 A. Yes.

10 Q. And if it just has the contactor, it's a contactor?

11 A. It's a contactor.

12 Q. And there were crossbars used with that series?

13 A. Well, yes; not the LWR type of material, though.

14 Q. What do you mean by that?

15 A. It did not have the asbestos, in other words, not that 3550

16 LWR that contained asbestos that your other documents referred

17 to.

18 Q. All right. So we can get this very clear then, sir, you're

19 saying that the Allen-Bradley Bulletin 702, for instance, and

20 709, would not have had an LWR crossbar on it; correct?

21 A. That's correct.

22 Q. And therefore, those crossbars would not have contained

23 asbestos; correct?

24 A. That's correct.

25 Q. And the arc shields and all that wouldn't have had asbestos,

26 either; correct?

27 A. That's correct, to my knowledge.

28 Q. You said to Mr. Keele, on direct, that the suspicion of

1 asbestos fiber release came from suppliers of molding compounds

2 in the early '70s. Do you remember that?

3 A. Yes, I do.

4 Q. So this is the suppliers telling you, Allen-Bradley, at

5 these conferences, as you mentioned?

6 A. Yes, um-hum.

7 Q. And did you do anything to verify what they were telling

8 you?

9 A. We could not verify what they were telling us, because what

10 they were telling us is that during the formulation of their

11 molding compounds, where they used raw asbestos in the

12 formulations, that once they processed it and then ground it

13 back up, that when they ran their tests, they found no

14 significant pre-asbestos fiber, according to the OSHA specs.

15 Q. The ones that were existing at that time?

16 A. The OSHA specs, right.

17 Q. Whatever the level was at that time?

18 A. Yes.

19 Q. So you're listening to the suppliers who are selling you the

20 product on this issue; correct?

21 A. That's correct.

22 Q. And they're telling you no problem?

23 A. No problem. Even at the worst case, in their plants, where

24 they used the raw asbestos, yes.

25 Q. Did they ever show you any test results to verify that?

26 A. No, they didn't.

27 Q. And these are the people that are selling you the molding

28 compounds with asbestos, for instance, or molding parts for you

1 with asbestos, selling to Allen-Bradley; correct?

2 A. No. These were the people that sold the molding compound to

3 Allen-Bradley. They were not the people that sold the parts.

4 Q. So it didn't include Rostone?

5 A. It did not include Rostone.

6 Q. These are just the people who were selling the phenolics and

7 melamines and so forth?

8 A. That's correct.

9 Q. And do you recall, for instance, during that time period, on

10 a yearly basis, how much, in dollars, those suppliers were

11 selling on a yearly basis to Allen-Bradley?

12 A. No, I couldn't estimate that.

13 Q. Was it a lot?

14 A. It was a lot, yes.

15 Q. That's when Allen-Bradley was number one, for instance?

16 A. Right.

17 Q. Wait a second. I think we're almost done here.

18 On the resistors, last thing on the resistors, sir. These

19 resistors that we looked at, they don't just work on their own

20 in the -- well, let me rephrase that. That was a bad question.

21 Exhibit 5025, the resistors, they have to be mounted into

22 something to perform their function; don't they?

23 A. They have to be in an electrical circuit, yes.

24 Q. And for electrical circuits with resistors, you have circuit

25 boards; correct?

26 A. That's one way.

27 Q. They have to be mounted in, for instance, circuit boards;

28 right?

1 A. They could be mounted in circuit boards. I'm just saying
2 that there are other ways of mounting it besides circuit boards.

3 Q. I understand that. But one of them is circuit boards?

4 A. Yes, one of them is circuit boards.

5 Q. And back in the '50s, that's something that you were
6 familiar was being done with Allen-Bradley resistors; right?

7 A. Not to a major extent. I think in the '50s, circuit boards
8 weren't as common or popular in circuits as they are today.

9 Q. Well, for instance -- you may be -- go ahead, I'm sorry.

10 A. I'm just saying in a typical radio application, there
11 weren't circuit boards; they were just wired in or soldered into
12 a circuit, and that was predominant in the '50s.

13 Q. Have you ever heard of a company called Ralph M. Parsons?

14 A. No, I haven't.

15 Q. As far as that time period, in the late '50s, you would
16 agree that the electronic industry was really nascent, it was in
17 its early stages; correct?

18 A. That is correct.

19 Q. And so to the extent that people were assembling parts,
20 electronic components, they were building prototypes and all
21 types of experimental things; correct?

22 MR. KEELE: Objection, foundation.

23 THE COURT: He may answer, if he knows.

24 THE WITNESS: I don't know for a fact, but I would assume
25 that.

26 MR. KEELE: Objection, move to strike.

27 THE COURT: Stricken.

28 MR. ANDREAS: Q. Well, did Allen-Bradley produce these

1 types of resistors for use in the electronic industry?

2 A. Yes, we did.

3 Q. And for purposes of being used in electronic equipment;

4 correct?

5 A. Yes.

6 Q. And that's what they're made for; right?

7 A. Yes.

8 Q. The panel boards that those would be mounted to, have you

9 ever heard that those were phenolic asbestos-containing boards?

10 A. No, I have not.

11 Q. Have you heard that they were phenolic boards?

12 A. I've heard of phenolic boards.

13 Q. To the extent that those have to be mounted onto a board,

14 the boards would have to be drilled and the resistors attached,

15 through contacts and so forth?

16 MR. KEELE: Objection, foundation, speculation.

17 THE COURT: Sustained.

18 MR. ANDREAS: Q. Do you know how resistors were attached to

19 panel boards?

20 A. No, I don't know. I do not.

21 Q. Was there a sales force for Allen-Bradley that would market

22 these to the electronic industry?

23 A. Yes. We had a separate sales force, yes.

24 Q. The sales force would go out and try to promote these, use

25 these resistors we're making now to put in your electronic

26 equipment?

27 A. Yes.

28 Q. That's the market; right?

1 A. Right.

2 Q. And in that regard, they go to their customers' facilities;

3 correct?

4 A. I believe so.

5 Q. To the extent that these boards, these circuit boards had to

6 be drilled and prepared for the resistors to be used, that would

7 be something that the sales force would know about, not you;

8 correct?

9 MR. KEELE: Objection, foundation.

10 THE COURT: Calls for speculation. Sustained.

11 MR. ANDREAS: No further questions.

12 THE COURT: Redirect.

13 MR. KEELE: Thank you, Your Honor.

14 REDIRECT EXAMINATION

15 MR. KEELE: Q. Mr. Maccani, if you could, do you have

16 Exhibit 84 up there, somewhere?

17 A. No, I do not.

18 Q. Exhibit 84 -- here it is. I'll get it for you. If I may

19 approach, Your Honor?

20 THE COURT: You may.

21 MR. KEELE: Q. I'm going to ask you some questions about

22 that. I'm sorry, have you ever seen this document before today?

23 A. No, I have not.

24 Q. Can you tell, from the part numbers that are listed on

25 Exhibit 84, which parts are identified -- or what type of parts

26 are referenced by these numbers?

27 A. The numbering system that we used changed over the years.

28 When we got to the stage where we were making Bulletin 500

1 devices, we changed to a 40,000 series. And there are eight or
2 nine parts, here, that have designations in the 40,000 series.

3 So that those would be, probably, parts most likely parts on
4 the Bulletin 500. At least, in that vintage.

5 The other numbers, the F numbers, starting off, here, the
6 majority -- or vast majority of these parts are in the F-10000
7 type designation, which would indicate to me that they're very
8 old parts. Predating my experience with them.

9 Q. Can you tell what type of parts? That is, are we talking
10 about cross bars?

11 A. No, I cannot. Not from this.

12 Q. Do you know whether each number comports with a part type or
13 specific part that's manufactured?

14 A. Each one is a specific part that's manufactured.

15 Q. Okay. And here you have 89 parts listed, approximately;
16 correct?

17 A. Yes.

18 Q. Okay. In the time frame of this memorandum and the only --
19 or the interdepartment letter, the only date on the face of the
20 document is what, Mr. Maccani?

21 A. Is it was received by someone on 6/11/75.

22 Q. Okay. And how many parts did Allen-Bradley manufacture?

23 Not part types, but how many parts did Allen-Bradley
24 manufacture?

25 MR. ANDREAS: Well, objection, unless it's restricted to
26 plastic.

27 THE COURT: Well --

28 MR. ANDREAS: Irrelevant.

1 THE COURT: He can answer, if he knows.

2 THE WITNESS: I would just have to say, it was in the tens
3 of thousands.

4 MR. KEELE: Q. And the date on this, again, is 1975;
5 correct?

6 A. That's correct.

7 Q. And where did that date fall, in terms of where you were in
8 your replacement or phase-out program, in terms of replacing
9 parts with asbestos?

10 A. That would have been when we were beginning the project,
11 basically, '75.

12 Q. When was the project completed?

13 A. In '77.

14 Q. In response to one of Mr. Andreas's questions, I think you
15 said that there was no reason to ask suppliers if molding
16 compounds contained asbestos in the 1950s. Why not?

17 A. There was no evidence published in any of our technical
18 journals, or anything, showing any concern for asbestos that was
19 in a molding compound. Once it's in a compound, it's
20 encapsulated.

21 Q. Who else, other than Rostone, Mr. Maccani, that you're aware
22 of, was a supplier of polyester molded parts?

23 MR. ANDREAS: Well, objection. It's vague as to time.

24 THE COURT: All right, sustained. Be more specific.

25 MR. KEELE: Q. Are you aware of any other suppliers of the
26 molded parts to component manufacturers, other than
27 Allen-Bradley, during the 1960s?

28 A. Yes.

1 Q. Who?

2 A. Glastic and Premix were two of the major competitors to
3 Rostone.

4 Q. How about during 1970s?

5 A. The same in the '70s. And another company called DMC was --
6 became a major factor in the industry.

7 Q. Other than wear resistance, Mr. Maccani, are you aware of
8 the other reasons that asbestos was put into plastic, into the
9 molding compound used for production of plastic parts?

10 A. Asbestos is a good high-temperature resistant material. And
11 although Allen-Bradley didn't use it for that reason, others in
12 the industry, the other material manufacturers, would make
13 asbestos-filled compounds for brake linings or brake shoes, that
14 type of product.

15 But Allen-Bradley didn't use it for that reason.

16 Q. In reference to, I believe, a Rostone document dated
17 December 16, 1980, which is Exhibit 97, do you have that?

18 MR. ANDREAS: I have it, here in this stack.

19 MR. KEELE: So that if I may approach and show him Exhibit
20 97.

21 Q. Do you recall Mr. Andreas showing that to you?

22 A. Yes, I do.

23 Q. Do you recall his reference to 20 million cycles? Do you
24 see that?

25 A. Yes, I see that.

26 Q. How do you know that there were life testing programs that
27 tested products by running them 20 million cycles?

28 A. Well, we were involved with some of the replacement

1 materials that would be tested that extent.

2 Q. Do you know the purpose for which that magnitude of cycles,
3 or why the part was run 20 million cycles? What was the purpose
4 of running it that high?

5 A. Generally, it was to provide a safety factor, I think.

6 Because we never knew how many cycles a device would be exposed
7 to. And so the design engineers would have to arbitrarily
8 estimate that. And I imagine 20 million is -- was a maximum
9 life expectancy.

10 Q. What was the objective of life testing, Mr. Maccani?

11 A. Two-fold. One was, in some devices where wear was a factor,
12 we would measure the wear, the change in dimension. Because in
13 the device that I showed you this morning earlier, there's a
14 guiding factor.

15 Once you have excessive wear on that cross bar, it chatters
16 in the device, which means that contacts, when they close and
17 make contact, would also chatter. And you'd get more arcing and
18 burning, and the contacts wouldn't last very long.

19 So the engineers would set an arbitrary limit. On some
20 devices it was ten one-thousandths of an inch of wear was the
21 maximum that they could tolerate and still get these contacts to
22 mate properly. So that was one reason.

23 The other reason was for strength. Some of these,
24 especially in this project, when we tried replacing asbestos
25 with other reinforcement, fatigue strength was a factor.

26 They wouldn't break right away, but with several million
27 cycles of constant pounding, a mechanism called fatigue sets in
28 and the cross bars would actually break.

1 So we were testing for wear, and for fatigue strength,
2 breakage.

3 THE COURT: I think we've reached our fatigue limit, at this
4 point. Why don't we take our luncheon recess until noon, by
5 that clock.

6 I want to remind you not to discuss this case amongst
7 yourselves, or with anyone else. If anybody contacts you, I
8 want to hear about it

9 (Luncheon recess was taken at 11:30 A.M.)

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1 AFTERNOON SESSION

12:00 P.M.

2 THE COURT: Back on the record. The record will reflect all
3 12 jurors and three alternates are present, as well as counsel
4 and parties.

5 The witness, Mr. Maccani, is on the stand being examined by
6 Mr. Keele.

7 MR. KEELE: May I proceed?

8 THE COURT: You may.

9 MR. KEELE: Q. Mr. Maccani, to your knowledge, did the
10 Series K line of products, after 1960, have components supplied
11 by Rostone?

12 A. Yes, they did.

13 Q. After 1960, did the Bulletin 500 line of components have
14 subcomponents provided or supplied by Rostone?

15 A. Yes, they did.

16 Q. And up to what period of time did Rostone provide
17 subcomponents for those two lines of products?

18 A. To the present day, I believe.

19 MR. KEELE: Thank you. That's all I have. Thank you, Your
20 Honor.

21 THE COURT: Any recross?

22 RE CROSS-EXAMINATION

23 MR. ANDREAS: Q. Sir, the life tests that Mr. Keele asked
24 you about -- do you remember, you briefly touched on that. The
25 life tests at Allen-Bradley, 10 to 12 million cycles; correct?

26 A. Yes.

27 Q. Those would take 10 to 12 weeks to conduct?

28 A. In that ballpark, yeah.

1 Q. So the parts would be cycling over and over again, opening
2 and closing these contactors, et cetera, 10 to 12 million times
3 over the course of 10 to 12 weeks?

4 A. Yes, in that ballpark. Again, I can't remember exactly how
5 fast we ran them. But it could be about that time frame.

6 Q. Did you ever conduct a life test where you ran the
7 contactors at 5,000 to 7,000 cycles for five to seven hours?

8 A. I have no knowledge of that.

9 Q. You mentioned some other competitors for Rostone for
10 polyester parts. Mr. Keele asked you about that. Do you
11 remember?

12 A. Yes.

13 Q. With respect to Allen-Bradley, I think I asked you, up
14 front. Almost all of it came from polyester parts from Rostone
15 up to the '80s; correct?

16 A. That's correct, almost all of it.

17 Q. Right. You mentioned two companies Glastic and Premix?

18 A. That's correct.

19 Q. But you don't know, for a fact, that Allen-Bradley ever
20 purchased polyester during that time period from those two
21 companies; correct?

22 A. No, I do not.

23 THE COURT: I think I have 84.

24 MR. ANDREAS: Q. Now, this was the document that Mr. Keele
25 started off with you. Do you remember that?

26 A. Yes.

27 Q. You told him that the F-10000 series was old parts that
28 predated your employment with the company?

1 A. Yes.

2 Q. This document is 1975; correct?

3 A. That's correct.

4 Q. And it says: "The following parts now purchased from

5 Rostone Corporation contain asbestos," correct?

6 A. That's correct.

7 Q. That includes the F-10000?

8 A. That's correct. When I said the old parts, they are

9 assigned the part number when they are designed and developed.

10 The F-10000 series would have been designed many years before I

11 started there. They could have been continued to be used

12 indefinitely.

13 Q. So you didn't mean to suggest, in your answer earlier, that

14 the F-10000 series on this document, 1975, were referring to

15 parts that had been discontinued?

16 A. No, I didn't say anything about discontinued.

17 Q. To the extent the company was purchasing these parts through

18 1975, they were incorporating it in Allen-Bradley products,

19 right?

20 A. I would believe so, yes. Obviously, the older parts would

21 be much lower quantities, you know. There may have only been

22 one or two parts of some of those older parts.

23 Allen-Bradley has always had the process going of replacing

24 any part almost indefinitely, as a replacement part.

25 Q. Well, there is only a few F-10000s on here; correct?

26 A. I just meant to imply that starting with F-1, digit, digit,

27 digit, it was an early part, probably one of the first ones we

28 made. And then as that number increases, it would become more

1 recent.

2 Q. I wanted to correct something on my board here. I did write

3 up here something that you did not specifically agree with me

4 on, and that is: On the polyester molded parts from Rostone to

5 Allen-Bradley, it was your belief that those were all hot

6 molded; correct?

7 A. Oh, no. I understand that we did obtain cold-molded parts

8 from Rostone.

9 Q. Polyester molded parts?

10 A. No, not polyester, correct.

11 Q. So you don't agree that the polyester parts would have been

12 cold molded; correct?

13 A. Correct, I agree with that.

14 Q. I'll cross that out. I don't want to attribute that to --

15 But again, you would defer to Rostone on how they molded

16 their parts; correct?

17 A. Yes.

18 Q. Thank you, sir.

19 Nothing further.

20 THE COURT: Anything further of this witness?

21 Thank you, Mr. Maccani. You may step down.

22 Any reason why Mr. Maccani should not be excused from giving

23 further testimony in this proceeding?

24 Hearing none, sir, you are excused and are free to leave.

25 Thank you for being with us today.

26 (Witness excused)

27 THE COURT: Your next witness?

28 MR. KEELE: Thank you, Your Honor.

