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UNITED STATES DISTRICT COURT

SOUTHERN DISTRICT OF CALIFORNIA

ANDREW SHALABY and SONIA DUNN-RUIZ, Plaintiffs, vs. NEWELL RUBBERMAID, INC., IRWIN INDUSTRIAL TOOL COMPANY, INC., a wholly owned subsidiary of NEWELL RUBBERMAID, INC.; BERNZOMATIC, an Unincorported Division of IRWIN INDUSTRIAL TOOL COMPANY; THE HOME DEPOT, INC.; and DOES 2 through 100, inclusive Defendants. And related cross-complaints.	Case Number Case No. C 07cv2107 MMA **DECLARATION OF DR. ROBERT N. ANDERSON IN SUPPORT OF PLAINTIFFS' MOTION FOR LEAVE TO SUPPLEMENT EXPERT DISCOVERY AND IN SUPPORT OF OPPOSITION TO DEFENDANTS' MOTIONS FOR SUMMARY JUDGMENT AND RELATED MOTIONS** Date: Febraury 6, 2009 Time: 2:30 p.m. Courtroom: 5 Judge: Hon. Michael M. Anello

I, Robert N. Anderson, declare as follows:

1. I am an expert witness retained by Plaintiff Andrew W. Shalaby and Sonia Shalaby (hereinafter "Plaintiffs") in this action.

2. I have been retained to examine all available evidence and testimony and provide an expert opinion as to the cause of the breach of a Bernzomatic-brand MAPP gas cylinder and torch, which caused Plaintiff's injuries on April 21, 2006. A photo of the actual MAPP gas cylinder and torch causing Plaintiff's injuries, taken before the accident, was provided to me and is shown in fig. 1 below.

fig. 1

fig. 2

3. Based on the preliminary information provided, there was reason to suspect that the brazed "bushing" of the subject cylinder had failed. The "bushing" as referenced herein is the threaded assembly welded on top of the cylinder, as shown in fig. 2 above, at the area of insertion of the card. The area of insertion of the card shows the area of defect on an exemplar purchased in September 2008.

4. On or about September 24, 2008 I was contacted directly by Plaintiff Andrew W. Shalaby and asked whether or not his recent recollection of certain events could be accurate and consistent with the physical description of the damage to the

Bernzomatic MAPP gas cylinder which had caused his injuries on April 21, 2006. Mr. Shalaby also revealed to me that his right index finger had not been substantially injured, indicating that his earlier belief that he may have been holding the cylinder by the torch handle and depressing the button at the time of the explosion could not have been correct. I observed this to be the case, because his index finger as shown in fig. 3 below would have rested directly over the area of the breach, fig. 4 (from an exemplar), and would have been badly injured..

fig. 3

Fig. 4 (exemplar)

Mr. Shalaby brought to my attention the existence of a safety "fracture groove" located on the Bernzomatic TS4000 torch handles such as the one Mr. Shalaby was using at the time of his injuries. Mr. Shalaby provided me with a package insert accompanying his purchase of a TS4000 torch and cylinder kit a few days earlier. The insert explains the fracture groove and its intended purpose, as shown in fig. 5 below.

fig. 5

5. To confirm Mr. Shalaby's recollection of events, and further investigate based on the above observations, on September 26, 2008 I performed stress tests on three TS4000 torch handles, and on the "bushing" of a new Bernzomatic MAPP gas cylinder. The torch handles were tested on a machine measuring the amount of force required to fracture the fracture grooves, as shown in figure 6 below:

fig. 6

fig. 7

The fracture grooves of the two torch handles fractured at 22, 23, and a third torch handle utilizing a reduced-thickness fracture area (a re-design of approximately June 2005) fractured at 26 foot-pounds (fig. 7, re-design shown as "Exp. 1").

6. Next, we tested the amount of force required to cause a fracture or separation at the bushing by applying force at the torch handle, below the fracture line, as shown in fig. 8.

fig. 8

fig. 9

The cylinder used was one evidencing no defects at the bushing (compare fig. 9 to fig.

2 on page 2). A force of 152 pounds was applied directly to the torch handle, below the fracture groove (fig. 8). The cylinder bushing (valve) began to bend at 15 foot-pounds of force, and bent as shown in fig. 9, but did not breach or separate.

7. The above tests revealed the following:

(a) The observations of figures 3 and 4 above indicate Mr. Shalaby could not have held the cylinder / torch assembly by the torch handle at the time of explosion because his index finger did not sustain any significant injuries.

(b) Consistent with the defendants' experts Dr. Thomas Eager's findings, as well as Mr. Shalaby's recollection, a force was applied to the tip of the torch handle, at the point of greatest leverage.

(c) Consistent with the fact that the bushing area was the area of breach as shown in the exemplars in fig. 10 and 11 below (taken from the "Gertz" and "Vanderlinde" cases posted at www.bernzomaticinjuries.com , located under the "lawsuits" tab), it would have been impossible for Mr. Shalaby to have been holding the assembly by the torch handle itself. If the assembly were held by the torch handle, any force applied to the torch tip would not be able to transfer to the bushing area, but would cease at the point of origin, the torch handle itself. This evidences establishes that Mr. Shalaby was holding the assembly by the yellow MAPP cylinder, consistent with his September 2008 recollection.

fig. 10

fig. 11

(d) Consistent with the fact that the subject cylinder was not bent at the "dome" in the manner shown in fig. 9 (as opposed to at the "separation" bends shown in figs 10 and 11 above), the force applied to the tip of the torch handle Mr. Shalaby was using at the time of his injury was well below 15 foot-pounds (absence of bending means force was below 15 foot-pounds).

(f) Consistent with Mr. Shalaby's recollection, the point of impact was at very top of the torch, at the tip, above the fracture groove. It would have been impossible for the point of impact to have been below the fracture groove, because the direction of force was opposite the direction of the angle of the silver torch tube, exactly as shown in the exemplars, figs. 10 & 11 above, and any force sufficient to breach the cylinder would have broken the red plastic trigger button and left evidence of

impact on the torch handle. As attested-to by the two rangers examining the torch handle and cylinder, there was no damage to the button or anywhere on the torch handle. In addition, the amount of force required to breach the cylinder below the fracture groove would have been well in excess of the amount of force someone with Mr. Shalaby's size and build could have exerted (well in excess of 152 pounds of direct force).

8. The defendants have expressed a theory, based on an alleged statement Mr. Shalaby made to a paramedic at the time of injury, that Mr. Shalaby had kicked the cylinder assembly into a campfire, and it exploded. I was unaware that photos of the actual injuries had existed prior to December 2008. Mr. Shalaby advises me that the hospital in San Diego had recently found photographs of his injuries, and he received the photos on or about November 6, 2008. I have examined the photos shown in figures 12-17 below.

fig. 12

fig. 13

fig. 14

fig. 15

fig. 16

fig. 17

Fig. 18

9. Figures 12-16, and the overall magnitude of the injuries, indicate Mr. Shalaby was at the epicenter of the "ball of fire" which engulfed him from head to tow. Fig. 17 reveals that the inside of his right hand was not burned because it was protected from the flames by the cylinder, with exception of injury to the exact portion of his hand which was exposed (fig. 18). Figures 17 and 18 in particular indicate that the cylinder was in Mr. Shalaby's hand at the moment of breach, while Defense expert Thomas Eager accurately explained that the MAPP gas cylinder would only breach when placed in a fire if a pressure relief valve located on top of the cylinder would have failed, and the injury would have been localized from only one direction, not circumferentially from head to toe. The recently discovered photos therefore disprove the defendants' theory that the cylinder had been kicked, on grounds of impossibility, consistent with Defense Expert Thomas Eager's opinion on this issue.[1]

10. It is my conclusion that Mr. Shalaby's recollection of late September

[1]I also note that the cylinder and torch did not have any ash, soot, or evidence of having been kicked into the fire, per the relevant deposition witnesses, further disproving Defendants' theory that the cylinder had been kicked into a fire.

2008, that he had tapped or nudged a piece of firewood at the moment of the explosion, while holding the cylinder substantially as shown in fig. 19 below, is wholly consistent with the evidence.

fig. 19

This conclusion is fully supported by the findings of my September 26, 2008 tests, consistent with my earlier findings disclosed prior to the close of expert discovery, and consistent with the burn injury patterns noted on the photos Mr. Shalaby received from the hospital in November 2008, which I learned of and examined for the first time in December 2008. These injuries could not have occurred absent a defective cylinder or fracture groove design. The area where the horizontal surface of the cylinder meets the vertical surface of the narrow neck (see fig. 2 above) should not separate at any force less than that which is required to fracture the safety fracture groove. The fracture groove separating at 26 foot-pounds establishes the minimum amount of force the cylinder must withstand so that the fracture groove may perform its intended function. The minimum force the cylinder bushing must withstand is therefore "greater than" 26 foot-pounds. The absence of a bend at the dome area (see fig. 9) establishes the force could not have exceeded 15 foot-pounds. In this instance the separation occurred at an estimated 3 foot-pounds or less. The absence of any evidence impact to the torch handle, and the fact that the fracture groove was not fractured, further prove with engineering certainty Mr. Shalaby's injuries were caused by a defective cylinder.

11. I do not recall whether or not I saw any literature on the TS 4000 torch handle's fracture groove prior to the close of discovery, but my focus was directed entirely towards examination of the cylinder bushing prior to learning of Mr. Shalaby's recollection of events in late September 2008. Prior to September 2008, Mr. Shalaby had no detailed recollection, therefore I did not learn of the fact that a tapping or nudging force had been applied to the tip of the torch, and I proceeded to conduct experiments based on a belief that the cylinder bushing area had separated without application of any force, other than perhaps the weight of the cylinder itself. As soon Mr. Shalaby had contacted me directly on or about September 24, 2008 and explained to me that he believed there was an application of force as described in his declaration, I conducted the necessary experiments within approximately two days, and prepared my report three days later. A true and correct copy of my report is attached as exhibit A hereto.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and within my personal knowledge, and where opinions are specified, said opinions are within my best judgment, and if sworn as a witness I can and will testify competently thereto.

Executed December 15, 2008 in Los Altos, California

Robert N. Anderson

Robert N. Anderson, P.E.

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September 29, 2008

Mark D. Epstein
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200 Pringle Avenue, Suite 410
Walnut Creek, CA 94596-7380

Re: Shalaby v. Irwin, et al.

Dear Mr. Epstein:

On September 26, 2008, I tested the Bernzomatic TS4000 torches and one cylinder.

Bernzomatic Torch literature states that "Fracture Groove enhances safety in case torch is dropped." Old design torches had such fracture grooves. However, the newer torches on the market do not have this Fracture Groove feature. The dimensions of the brass in the newer, un-grooved TS4000 torches are reduced at the very point where the fractures have occurred.

The test on 9/26/08 was to determine the force required to fracture the grooved and the new, un-grooved torch. Three torches were tested. The first torch had no grooves and fractured at 26 ft. lbs. Tests 2 and 3 were on the grooved torches and those fractured at 22 ft. lbs. and 23 ft. lbs., respectively.

The strength of the valve in a cylinder valve also was tested in a new MAPP gas cylinder (W11G149W) that had been purchased just a week before the test. The top dome of that cylinder, under test, started to deform at 15 ft. lbs. and continued to deform to 25 ft. lbs. without a breach that would cause venting. I believe the above tests proved two things:

First, it shows that "abuse" of the torch, such as dropping it or striking it on a hard surface or pushing against a resistance, is more likely to cause a fracture in the TS4000 torch itself, rather than to the area of the valve in the cylinder.

Second, it shows that unless there are defects present in the cylinder, "abuse" will merely cause deformation of the cylinder and will not cause breach of the cylinder in the area of the valve.

The witnesses at the time of the accident did not report the Shalaby cylinder top dome to have been deformed, indicating that less than 15 ft. lbs. force had been applied.

These defects in the cylinder, that cause the Shalaby cylinder to vent at less force that 15 ft lbs, may be the result of manufacturing problems or the result of aging and corrosion.

It is likely that Mr. Shalaby was holding the cylinder itself at the time of his accident and not the TS4000, based on the fact of the lack of burns to his little finger of his right hand. Hence, any force to the cylinder valve most likely was transmitted by the torch tip. Had an "abusive" force been applied to the tip, the brass would have fractured, and not the cylinder.

The argument that Mr. Shalaby "abused" the MAPP gas torch and cylinder is false. The TS4000 would fail if forces were applied to it, and a non-defective cylinder should not vent. The conclusion is that the cylinder that Mr. Shalaby was using was defective.

Please call me if you have any questions.

Sincerely,

Robert N. Anderson, Ph.D., P.E.