

**IN THE UNITED STATES BANKRUPTCY COURT
FOR THE DISTRICT OF DELAWARE**

In re:)	Chapter 11
)	
TK HOLDINGS INC., <i>et al.</i> ,)	Case No. 17-11375 (BLS)
)	
Debtors. ¹)	
)	

OPINION

Before the Court are the Third, Eighth and Ninth Omnibus Objections to No Liability Claims (the “Claim Objections”) [Docket Nos. 3528, 3671, and 3943] filed by the Trustee of the Takata Airbag Tort Compensation Fund (the “Trustee”). As discussed in detailed below, the Trustee has objected to claims filed by parties who allege they were injured as a result of an airbag’s failure to deploy during an automobile accident.² The Trustee asserts that, if an airbag failed to deploy, the cause lies not with the Takata inflators that are the heart of this bankruptcy proceeding, but rather with the sensors or other hardware not manufactured by Takata.

For the reasons that follow, the Court will sustain the Claim Objections and disallow the claims identified therein.

BACKGROUND

Prior to commencing these Chapter 11 proceedings, Takata was a leading global developer and manufacturer of automotive safety and non-safety systems, including airbags and seat-belts.³

¹ The Debtors in these chapter 11 cases are Takata Americas, TK Finance, LLC; TK China, LLC; TK Holdings Inc.; Takata Protection Systems Inc.; Interiors in Flight Inc.; TK Mexico Inc.; TK Mexico LLC; TK Holdings de Mexico, S. de R.L. de C.V.; Industrias Irvin De Mexico, S.A. de C.V.; Takata de Mexico S.A. de C.A.; and Strosshe-Mex, S. de R.L. de C.V. (the “Debtors” or “Takata”).

² The claimants whose proofs of claim are the subject of this opinion are James D. DeBouno, Jr., James E. Artel, Edwin Almonte, Rebecca Burchette, Austin Cogar and Christopher Cogar, Barry Cohen, Tieas Cole, Marilyn Coley, Edwina Gonzalez, Robert Montreal, Odell Wilson and Para C. Davis (collectively, the “Claimants”). *See* Tr. (2/11/2020) at 92:23 – 93:12 (Docket No. 4087).

³ The Court provides here only the most general overview of these otherwise enormously complex Chapter 11 proceedings.

The record reflects that, among other products, Takata manufactured airbag inflators containing phase-stabilized ammonium nitrate (“PSAN”), which had the potential to rupture upon airbag deployment, causing death and serious injury to automobile occupants. In response to multiple reports of injuries caused by PSAN inflators in vehicles, the National Highway Traffic Safety Administration (“NHTSA”) initiated the largest product recall in U.S. history.

On June 25, 2017 (the “Petition Date”), the Debtors each filed a voluntary petition for relief under chapter 11 of the Bankruptcy Code.⁴

On October 4, 2017, this Court entered an Order which, among other things, established bar dates and procedures for filing proofs of claim against the Debtors [Docket No. 959] (the “Bar Date Order”), including the following deadlines: (i) November 27, 2017 for filing General Proofs of Claim,⁵ (ii) December 22, 2017 for filing Governmental Proofs of Claim, and (iii) December 27, 2017 for filing a PPIC Proof of Claim (i.e., proofs of claim by individuals asserting claims for economic loss, personal injury, or wrongful death arising out of or relating to PSAN Inflators).

On February 21, 2018, the Court entered an Order [Docket No. 2120] confirming the Fifth Amended Joint Chapter 11 Plan of Reorganization of TK Holdings Inc. and its Affiliated Debtors (the “Plan”) [Docket No. 2116]. The Plan divides personal injury and wrongful death (“PI/WD”) claims related to Takata Products sold or supplied prior to the Petition Date into two classes: (i) Class 5 PSAN PI/WD Claims for claims related to an injury or death allegedly caused by a PSAN inflator; and (ii) Class 7 Other PI/WD Claims for claims, other than PSAN PI/WD Claims,

⁴ Additional information regarding the circumstances leading to the commencement of these Chapter 11 Cases and information regarding the Debtors’ businesses and capital structure is set forth in the Declaration of Scott E. Caudill in Support of Debtors’ Chapter 11 Petitions and First Day Relief, dated June 25, 2017 [Docket No. 19].

⁵ This category includes the Class 7 Other PI/WD Claims established by the Plan (discussed below).

arising out of or relating to an injury or death allegedly caused by a Takata Product.⁶ The Plan became effective on April 10, 2019 [Docket No. 2646] (the “Effective Date”).

Upon the Effective Date, the Plan established the Takata Airbag Tort Compensation Trust Fund (“TATCTF”), in relevant part, for the purpose of administering, resolving, liquidating, and satisfying the Class 5 PSAN PI/WD Claims, the Class 7 Other PI/WD Claims, as well as other claims as described in Section 5.10 of the Plan. Eric D. Green was appointed Trustee of the TATCTF.

The Trustee filed the Third, Eighth and Ninth Omnibus Objections on December 12, 2018, February 25, 2019, and July 16, 2019, respectively. The Claimants filed responses objecting to the disallowance or expungement of their claims under the applicable Claim Objection. This Court held a combined hearing to consider the Claim Objections on November 25, 2019 (when the Trustee presented his expert witness) and on February 11, 2020 (when the Claimants presented their witness and the parties made closing arguments). The matter was then taken under advisement.

PARTIES’ POSITIONS

The Claimants assert that they can properly pursue their claims against the Trust on the theory that injuries suffered by an airbag’s failure to deploy – just as those from a too-violent deployment – are the fault of products manufactured by Takata. The Trustee, on the other hand, does not dispute that an airbag failed to deploy, or that the failed deployment caused injuries to the Claimants. Rather, the Trustee contends that, if an airbag failed entirely to deploy, the problem was with a component not manufactured by Takata and, therefore, the claims may not be pursued against the Trust.

⁶ The Claim Objections assert that each of the claims that are the subject of the Claim Objections is a Class 7 Other PI/WD Claim for which the Debtors are not liable.

JURISDICTION

This Opinion constitutes the Court's findings of fact and conclusions of law pursuant to Fed. R. Bankr. P. 7052. This Court has jurisdiction to decide the Claim Objections pursuant to 28 U.S.C. § 157 and § 1334. This is a core proceeding pursuant to 28 U.S.C. § 157(b)(2)(B).

STANDARD

The Trust objects to the claims under 11 U.S.C. § 502(b)(1), which provides that a court will disallow a claim to the extent it is unenforceable under applicable law. The Claimants, therefore, will be entitled to payment only if they have a valid claim against the Trust.⁷

The burden of proof for a claim filed in a bankruptcy proceeding “rests on different parties at different times.”⁸ Initially, the claim holder must establish the prima facie validity of the claim.⁹ Bankruptcy Rule 3001(f) provides that a proof of claim executed and filed in accordance with the rules of procedure (i.e., includes the facts and documents necessary to support the claim), constitutes prima facie evidence of the validity and amount of the claim.¹⁰ The claim objector must then produce evidence that, “if believed, would refute at least one of the allegations that is essential to the claim’s legal sufficiency.”¹¹ At that point, the burden shifts back to the claim holder to prove the validity of the claim by a preponderance of the evidence.¹² The ultimate burden of persuasion rests on the claim holder.¹³

⁷ See *In re Combustion Eng'g, Inc.*, 391 F.3d 190, 245 n. 66 (3d Cir.2004). (“To determine whether claims are enforceable for bankruptcy purposes, § 502 relies upon applicable non-bankruptcy law. . . . Ultimately, the effect of § 502 is to provide a bankruptcy trustee with the same rights and defenses to claims as held by the debtor prior to bankruptcy.” (internal punctuation and citations omitted)).

⁸ *In re Allegheny Int'l, Inc.*, 954 F.2d 167, 173 (3d Cir. 1992).

⁹ *Id.* (“[T]he claimant must allege facts sufficient to support the claim. If the averments in his filed claim meet this standard of sufficiency, it is ‘prima facie’ valid.”).

¹⁰ Fed. R. Bankr. P. 3001(f). *In re Samson Res. Corp.*, 569 B.R. 605, 615 (Bankr. D. Del. 2017).

¹¹ *Allegheny*, 954 F.2d at 173.

¹² *Id.* at 174.

¹³ *Samson Res.*, 569 B.R. at 615.

In this case, the Claimants met their initial burden when they filed their proofs of claim. The Court must determine whether the Trust has provided sufficient evidence to adequately rebut the validity of their claims. Ultimately, however, the burden shifts back to the Claimants to prove their claims by a preponderance of the evidence.

DISCUSSION

These bankruptcy proceedings arose after allegations of injuries suffered by drivers and passengers due to faulty airbags spawned many personal injury suits and a massive vehicle recall. The recall focused on airbags that inflated too violently due to defective PSAN inflators made by Takata, thereby injuring or killing drivers and passengers with “shrapnel” from the airbag deployment. In contrast, the Claimants here assert claims for injuries suffered when an airbag completely failed to deploy when needed. The Trustee objects to those claims, arguing that if an airbag failed entirely to deploy, the problem was caused by a component not manufactured by Takata.

A. The Trustee’s Expert Witness

In support of its Claim Objections, the Trustee offered the testimony of Harold R. Blomquist, Ph.D. Dr. Blomquist was retained by the Takata Airbag Tort Compensation Trust Fund (“TATCTF”) to consult on scientific issues related to the TATCTF’s administration of Other PI/WD Claims. At the hearing on the Claim Objections, the Court admitted into evidence the “Expert Report of Harold R. Blomquist, Ph.D.” and the “Supplemental Declaration of Harold R. Blomquist, Ph.D.” [Docket No. 3593]. Dr. Blomquist testified and was subjected to cross-examination at the hearing.

The record reflects that Dr. Blomquist has a Ph.D. in Chemistry and thirty-seven years of industrial research and development (R&D) experience as both a staff scientist and a

manager/director of R&D activities. The primary focus of his industrial assignments was the design of energetic solid materials such as propellants, pyrotechnics, explosives, and gas generants for missile systems and automotive airbag applications.¹⁴

During his twenty years in automotive engineering and fifteen years as a scientist and R&D manager/director for three rocket companies, Dr. Blomquist gained wide ranging experience developing energetic materials and propulsion systems and familiarity with the automotive development process for air bag systems.¹⁵

Dr. Blomquist was previously retained by the National Highway Traffic Safety Administration (“NHTSA”) to consult on scientific issues related to NHTSA’s investigation into rupturing air bag inflators manufactured by TK Holdings Inc. (“TKH”), and to assist NHTSA with the identification and verification of the root-cause(s) for the ruptures. In this role, he gained specialized knowledge regarding and experiences with TKH inflators. He conducted this work, which has been completed, as an independent expert on behalf of NHTSA, and not on behalf of TKH, any original equipment manufacturer, or any claimant involved in these Chapter 11 Cases.¹⁶

The Court accepted Dr. Blomquist’s testimony in this matter as an expert in airbag technology.¹⁷

(1) Airbag Systems, Generally

In his Declaration supporting the Claim Objections, Dr. Blomquist described vehicle airbag systems generally as follows:

The airbag system is comprised of a computer processor called the electronic control unit (“ECU”) and the airbag module, which consists of a plastic cover, a folded airbag cushion, the housing, and the inflator. The process of deploying an airbag upon collision begins with crash sensors – small electronic

¹⁴ Blomquist Decl. at ¶ 2 (Docket No. 3530).

¹⁵ *Id.* ¶ 3.

¹⁶ *Id.* ¶ 4.

¹⁷ Trial Tr. (Nov. 25, 2019) at 49:2 – 50:23.

components that detect changes in the velocity and direction of the automobile. Upon impact, these sensors measure how quickly a vehicle slows down in a frontal crash or accelerates to the side in a side-impact crash. The data collected by these sensors is sent to ECU, which then assesses the severity and direction of the impact. The ECU uses software algorithms to determine whether airbag deployment is necessary, depending on variables such as the speed of the crash, the angle of the crash, and the position of the vehicle occupant.¹⁸

If the ECU determines that a deployment should occur, it sends a signal (electrical current) within milliseconds to the inflator. Upon receiving the signal, the inflator converts the signal to a chemical combustion reaction, which generates a harmless gas that releases into the airbag, causing the airbag to fill with gas. *In other words, the inflator is a chemical component that responds to the signal it is given from the ECU and inflates when the signal is given.*¹⁹

At the hearing on November 25, 2019, Dr. Blomquist also testified in more detail about airbag system operations:

Q: Dr. Blomquist, could you please describe for the Court how the airbag system, including the electronic control unit – or ECU – the airbag module, and the inflator, how they generally work.

A: So, in the event of a crash, a number of sensors come into play. So, we have sensors that sense contact in the front. There's an accelerometer inside the ECU, the control module, and certain states must be achieved on every signal that's coming in, and if you think of it as a green light, all signals must be green or there's a no-fire condition.

That includes the accelerometer threshold, which reflects whether we meet the 15-mile-per-hour - - originally 12-mile-an-hour -- whatever the automaker sets it at -- but there is a threshold below which seat belts do an adequate job and airbags may do damage if fired under those conditions. And the judgment was made some time ago to pick that threshold and stick to it and some of that had to do with people being, you know, having injuries that were more severe than seat belt damage – seat belts harm people in a crash. So, there was a judgment made that the combination is better above a threshold and not better below that threshold.

Once you get all green signals, then the same control module in a separate part of the circuitry sends a firing signal. It sends between one and four

¹⁸ Blomquist Decl. at ¶ 7 (Docket No. 3530).

¹⁹ *Id.* at ¶ 8 (emphasis added).

firing signals, depending on the math of all of those sensor signals. So, that algorithm is propriety to every automaker.

The control module people work with the automakers to fashion it the way they want it, and that is the same module that stores the crash data that is downloaded on the forensic side, post-crash. So, it has a lot of duties, but relative to firing the airbag, the only job, it has to send current or not send current down the wires to the pyrotechnics, and the pyrotechnics would include seat belt pretensioners, if present; driver-and-passenger frontal airbag systems; head-restraint cushions, if present; side-impact cushions; rollover curtains. It has a lot of duties in a modern car.

But all of those things are handled in one little box. It goes by various names in different situations – at least seven or eight different names, if you dig into it – but it has that function; it is the brains of the system and it controls what it does with those sensor signals. And the only one that matters for the airbag is the current flowing to the wire on the electrical initiator.

Q: So when that signal is sent, what happens with an inflator?

A: So, there's three complements to think about inside the inflator. There's the initiator, which is the only complement that knows anything about electricity. It basically has a filament like a light bulb and like a light bulb, it gets hot.

The pyrotechnic mixture that's adjacent to that hot wire is a primary explosive; it's extraordinarily sensitive and, therefore, you don't want a lot in the vehicle. So, there's a small amount, it's in a stainless-steel cap, and when the wire fuses melts, it causes that material to ignite.

It burns extraordinarily fast and that ignites that second pyrotechnic in the chain of events, which is usually the booster propellant. The booster propellant is just a larger charge of a somewhat less-sensitive material, but it is pyrotechnic. It mainly makes heat and particulate, but not gas - - not by design to make gas. Its job is to transfer that electrically motivated primary signal – primary explosive signal, to amplify it and light all surfaces of the main charge, which is the third pyrotechnic of the chain, and the surface of that pyrotechnic is what controls the rate at which gas is delivered. So, in the design process, that charge is very, very carefully handled – the diameters, the thicknesses, the surface areas – those are the guts of controlling how fast gas is made once it's lit.

And all of the companies get very good at it. The technology is derived from the defense side where the same kinds of, you know, pyrotechnic trains, step-by-step, are used to light a piece of ordinance or fire a bullet in a gun.

So, there's a lot of old art and some new art as a function of the high-volume production that's required.²⁰

(2) Dr. Blomquist's Opinion

Dr. Blomquist testified as to his opinion that an airbag's failure to deploy is caused when an inflator fails to receive a signal from a sensor²¹ or, as he stated in his declaration (and reiterated in his testimony):

The manufacturer of the inflator or airbag module cannot be in any way responsible for failure to deploy events since their components are not involved in determining whether the deployment should occur.²²

Dr. Blomquist also testified that Takata does not manufacture ECUs or sensor components:

Q: Dr. Blomquist, do you have an understanding - - yes or no - - as to whether Takata had involvement with the manufacture, sale, or design of ECUs or sensor components?

A: To my knowledge, they have never been in the ECU-manufacturing business or the sensor business.

Q: And what is that knowledge based on, sir?

A: Just being in the industry for 20 years and now as a consultant for 5 more.²³

²⁰ Trial Tr. (Nov. 25, 2019) at 51:12 – 54:11.

²¹ Trial Tr. (Nov. 25, 2019) at 65:24 – 66:2.

²² Blomquist Decl. at ¶ 9 (Docket No. 3530); Trial Tr. (Nov. 25, 2019) at 56:24 – 57:18.

²³ Trial Tr. (Nov. 25, 2019) at 62:5 – 62:12. *See also, id.*, at 99:9 – 99:14 (Q: Now, to your knowledge, if you know is the electronic control unit, this ECU, is that manufactured by Takata? A: Not to my knowledge. Q: Is it at all assembled by Takata? A: No.). This is also confirmed by the Declaration of Michael Rains [Docket No. 3531], the former Vice President of the Product Safety Group and Chief Safety and Compliance Officer for TK Holdings Inc., who stated that “none of the Debtors manufactured, sold, or were in any way involved with the design of electronic control unit or crash sensor components in the vehicles at issue in the No Liability Claims.”

In his Supplemental Declaration, Dr. Blomquist stated that his opinion is also supported by testing done by Takata:

Takata has tested over 360,000 inflators and distributed parts to supporting laboratories. In these tests, whenever the inflators received a signal (electric current), the inflators functioned (converting the signal to a chemical combustion reaction and causing the airbag to fill with gas). Even defective inflators responded to the signal, albeit too vigorously. The results provide further support for my determination that the inflator has no role in the failure of an airbag to deploy.²⁴

In his testimony on November 25, 2019, Dr. Blomquist confirmed that “with respect to the 360,000 tests that Takata performed, whenever the signal was sent, the bag inflated.”²⁵

The Claimants argued that tests performed by Takata are not reliable since the company, pre-petition, plead guilty in a criminal case to criminal fraud and paid significant fines and damages. Dr. Blomquist, however, testified that the records regarding the testing of 360,000 inflators were not related to the falsified records:

So, the 360,000 are laboratory tests done long after the fraud. Those were done in response to interactions with NHTSA [National Highway Traffic Safety Administration] and under orders of NHTSA. . . . The recordkeeping for that is under NHTSA’s control.²⁶

Moreover, Dr. Blomquist stated that his opinion was supported by laboratory testing and analysis of the propellants in inflators:

In addition, various investigators have dissected over 11,000 of these inflators to obtain and perform analyses on the propellants in the inflators. The investigators reported that the chemical integrity (measurable properties) of all ingredients in the mixtures (used to produce gas) sampled from field inflators are essentially indistinguishable from new materials. These findings demonstrate that the propellants in the inflators are not subject to chemical degradation over time that would result in the failure of the inflator to generate and release gas into the airbag.²⁷

²⁴ Blomquist Supp. Decl. at ¶ 3 (Docket No. 3593).

²⁵ Trial Tr. (Nov. 25, 2019) at 157:23: - 158: 1.

²⁶ Trial Tr. (Nov. 25, 2019) at 89:18 – 90:5.

²⁷ Blomquist Supp. Decl. at ¶ 4 (Docket No. 3593).

In his testimony, Dr. Blomquist reiterated that, based on testing done by four laboratories - - not just by Takata - - there was no evidence that chemicals in the inflators degraded:

So, all laboratories have come to the same conclusion that the chemicals in the mixture used by Takata are pristine; they're identical in their chemical nature to when they were put into the mixture in the first place.

So, going back to your question, if they had degraded, that's a different question. The problem is [there's] not evidence they've degraded. The evidence is to the contrary.²⁸

B. The Claimants' Witness

In response to Dr. Blomquist's testimony, the Claimants offered the testimony of James D. DeBouno, PhD. Dr. DeBouno is one of the Claimants and possesses a doctorate in environmental science and taught chemistry and biochemistry at several colleges and universities.²⁹ While Dr. DeBouno's background does not lend itself directly to providing expert testimony on the issues at the heart of the Claim Objections, the Court nevertheless afforded the parties and Dr. DeBouno broad latitude to offer testimony at the hearing.³⁰

Dr. DeBouno challenged Dr. Blomquist's assertion that the PSAN inflators simply could not cause a failure to inflate. For example, he testified that his understanding of the properties of ammonium nitrate, when exposed to harsh conditions over a period of years, could degrade and fail to perform as intended:

A: What the greenhouse effect actually does and what it is is, you know, that there is a vehicle which contains glass windshield and windows. What happens to the vehicle is that solar radiation during daylight, its short wave, will be able to penetrate the glass or windshield and enter the vehicle. And then if the energy within the short waves becomes absorbed by materials within the vehicle and changed into long wave infrared radiation and the greenhouse terminology refers to the fact that once it changes to infrared, it cannot escape from the vehicle.

²⁸ Trial Tr. (Nov. 25, 2019) at 92:20 – 93:2.

²⁹ Trial Tr. (Feb. 11, 2020) at 23:7 – 25:24.

³⁰ Trial Tr. (Feb. 11, 2020) at 31:20 – 33:6.

So, you know, and then what happens is that inside the vehicle the temperatures rise and as the materials become hotter and hotter and this is in combination with other environmental factors within the vehicle like humidity in the presence of water vapor. And what happens is that, of course, as you have heating inside the vehicle, relative humidity will, of course, decrease.

So, what happens is after this event has taken place, the hot temperatures occur, the relative humidity changes, increasing, becoming less humid - - as relative humidity becomes less humid, the absolute humidity is the same. But that will change and that will be reduced due to the high heat and temperature.

And then what happens is on cooling, cooling can be affected by several ways, either darkness or absence of light going into the vehicle or air conditioning. And the air conditioning will quickly cool conditions inside the vehicle. And, of course, as this is taking place, the phase stabilized ammonium nitrate becomes affected each time.

Q: Professor, does this have anything to do with, without getting too technical, recrystallization of molecules?

A: Yes.

Q: Just briefly, could you just give us a general layman's idea of what that involves?

A: Well, what's happening there is that as the humidity and moisture changes, . . . water is acting as a solvent and begins to dissolve the existing phase stabilized ammonium nitrate and it will begin to recrystallize again as it cools.

Okay but what happens in a technical way that the - - just to say directly in a sentence the surface incorporation step in the crystallization process, and this is covered under my patent, that the surface incorporation step becomes very limiting in the reaction. This leads to larger and larger crystals.

Q: Would this have an impact upon non-deployment of the airbag?

A: Yes, yes.³¹

....

³¹ Trial Tr. (Feb. 11, 2020) at 35:1 – 36:23.

Q: Over a period of time would the chemicals, the PSAN, the phase stabilized ammonium nitrate compound within the airbag module within a period of time would those chemicals, generally, degrade?

A: Yes, that's what we're talking about.³²

Dr. DeBouno also testified that he believed leakage of PSAN propellant could cause non-deployment of the airbag:

Q: Could you tell us whether a leakage of the PSAN propellant could affect a non-deployment of the airbag?

A: Certainly. . . . Well, the combustion process, again, would not be able to possibly occur and have the propellant, you know, force through, okay, the outlets and, therefore, it may not - - again, it will affect. It will affect this.

Q: So if there is a leakage would that be inconsistent with Dr. Blomquist's testimony that any failure to deploy would not be the result of a - - some dysfunction or malfunction of the airbag inflator or module?

A: Right that's inconsistent with what he said, right, as well as the changes over time in the PSAN due to this greenhouse effect. . . .³³

Dr. DeBouno also testified that he believed the problems with the chemical components within the PSAN inflator could result in the airbag's failure to deploy:

Q: Do you recall him [Dr. Blomquist] also testifying that the PSAN, this propellant, this chemical propellant, phase stabilized ammonium nitrate, in the inflator failed to mandate specifications at page 152, beginning at line 18 of the record;³⁴ do you recall that testimony?

A: Yes.

Q: That the propellant failed to meet specifications that were mandated by law?

A: Yes.

Q: All right, and how would that failure to meet specifications of PSAN, how could that cause a non-deployment of the module or of the airbags?

³² *Id.* at 38:4 – 38:8.

³³ Trial Tr. (Feb. 11, 2020) at 40:22 – 41:11.

³⁴ This is a reference to the transcript of the trial on November 25, 2019.

A: Well there's a couple different reasons possible. One is that you have chemicals that were not active enough. They could have been expired or mixed incorrectly. And I can point to some testimony from –

Q: No, no. Before you get into the testimony. Would a degradation of the PSAN chemical component or propellant such a degradation could that be a failure to specified standards?

A: Yes it could –

Q: Could such a degradation cause a non-deployment?

A: Yes because the rate of the reaction would be changed and (indiscernible).³⁵

C. Analysis

The Claimants argue that the evidence showed - - and the Trustee admits - - that Takata inflators were defective. Therefore, the Claimants say, it follows that defective inflators caused the airbags to fail to inflate. However, Dr. Blomquist's testimony explained that the inflators' defect did not affect deployment. Instead, his explanation of the workings of the airbag, supported by the 360,000 Takata tests, demonstrated that even defective inflators always responded when they received a signal from an ECU or sensor, and caused the airbag to inflate.

Dr. DeBouno testified that environmental conditions (such as the greenhouse effect, solar radiation, intensive humidity, molecular recrystallization) could cause degradation of the chemicals in PSAN inflators, which would cause airbags not to deploy. However, Dr. Blomquist disagreed and testified convincingly that any potential degradation issues in the PSAN chemical components would only change the *rate* of an airbag's inflation, not whether there was any inflation or deployment.³⁶ Further, the investigations discussed in Dr. Blomquist's Supplemental

³⁵ Trial Tr. (Feb. 11, 2020) at 43:1 – 44:3.

³⁶ Trial Tr. (Nov. 25, 2019) at 157:18 – 21.

Declaration, describing the analysis of the propellants in over 11,000 inflators, revealed that any chemical degradation was not enough to cause the inflator to fail to generate and release gas into the airbag.³⁷ In short, Dr. DeBouno's testimony poses hypothetical reasons why a PSAN inflator might break down, but the evidence before the Court does not support this.

Similarly, Dr. DeBouno speculated that leakage in an airbag could cause non-deployment. Dr. Blomquist's testimony agreed that if an inflator had leakage, the leaks could affect the operation or potency of the PSAN chemicals, which could affect deployment of the unit.³⁸ However, Dr. Blomquist disagreed that leakage could cause nondeployment of an airbag because, in his view, such a defect in the housing of the chemicals would be found through rigorous testing and rejected at the factory.³⁹ On this point, each side speculated and engaged in hypotheticals, providing no basis to assist the Court in making its determination.

Upon consideration of evidence before the Court, including reports and testimony presented by both parties at the hearing, the Court concludes that the preponderance of the evidence supports the Trustee's assertion that the Takata inflators did not cause the non-deployment of airbags. Dr. Blomquist's expert testimony is credible, supported by studies and his lengthy experience, and was not adequately rebutted by the Claimants' evidence.

³⁷ Blomquist Supp. Decl. (Docket No. 3593) ¶ 4.

³⁸ Trial Tr. (Nov. 25, 2019) at 103:4 – 104:5.

³⁹ *Id.* at 104:6 – 105:9.

CONCLUSION

The Court concludes, based upon the record before it, that the Trustee has met his burden of proof and demonstrated, by a preponderance of the evidence, that the Takata inflators have no role in the failure of an airbag to deploy. Accordingly, the Trustee's Claim Objections will be sustained and the claims will be disallowed. The parties should confer and submit an appropriate Order consistent with this Opinion within 14 days of the date hereof.

FOR THE COURT:


BRENDAN LINEHAN SHANNON
United States Bankruptcy Judge

Dated: October 8, 2020