

BILLERUD AKTIEBOLAG (PUBL)

V.

WESTROCK MWV, LLC

Case No. IPR2023-01206

Patent Owner's Demonstratives

The '142 Patent

(Exhibit 1001, Fig. 1)

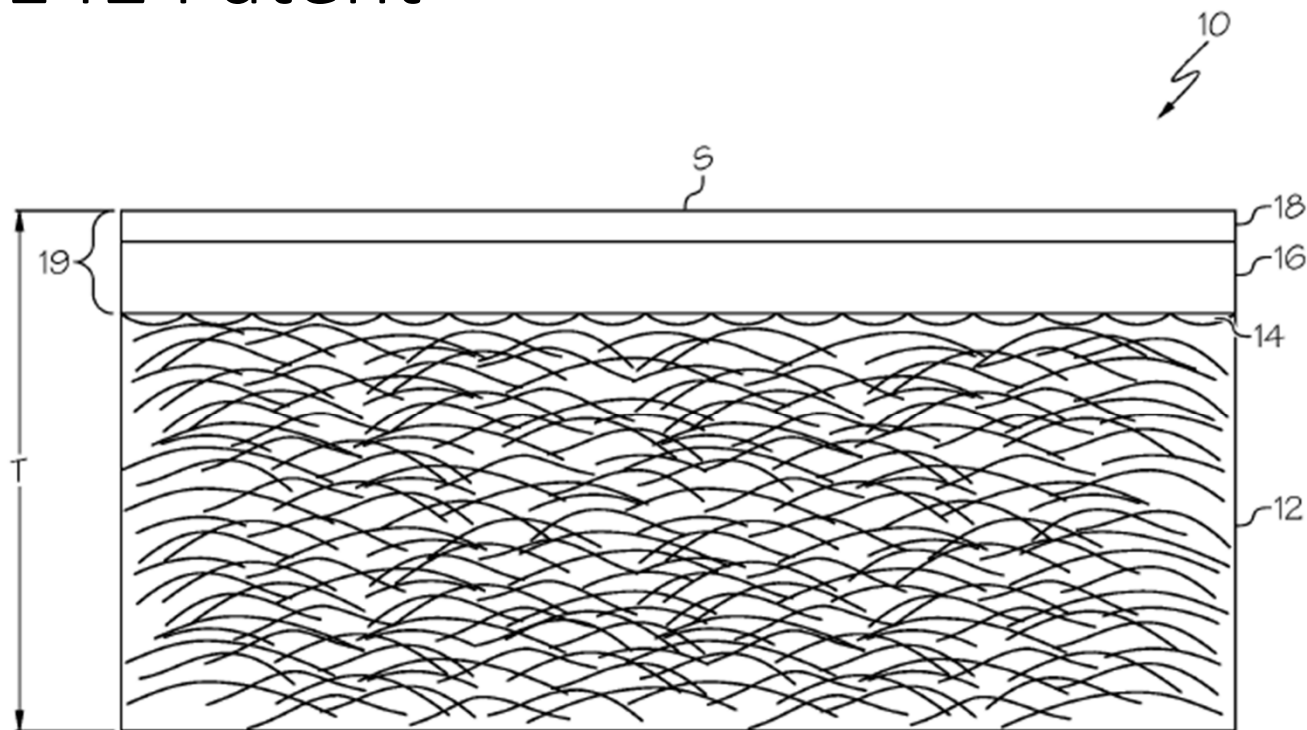


FIG. 1

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

The '142 Patent

(Paper 2, p. 2)

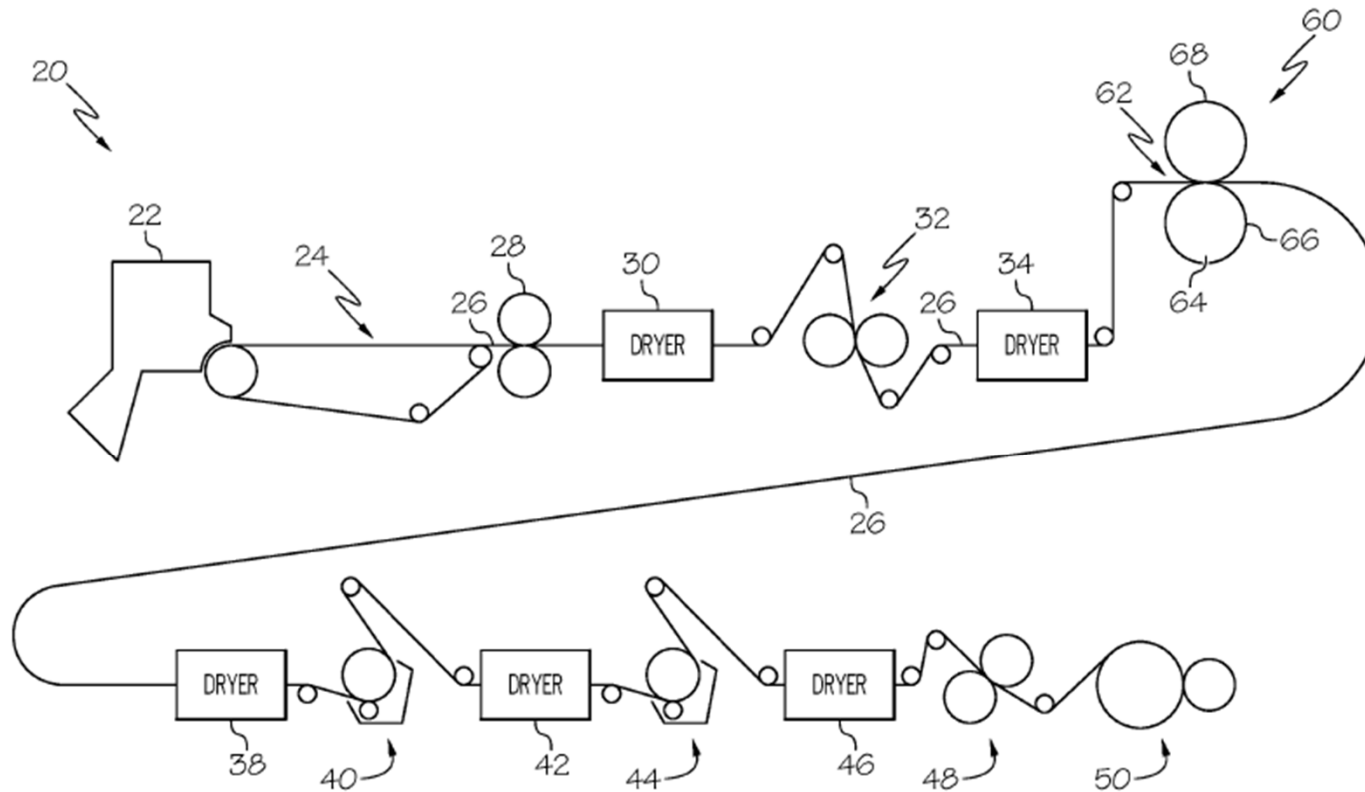


FIG. 2

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

The '142 Patent

(Paper 13, p. 12 (citing Ex. 2003, ¶134))

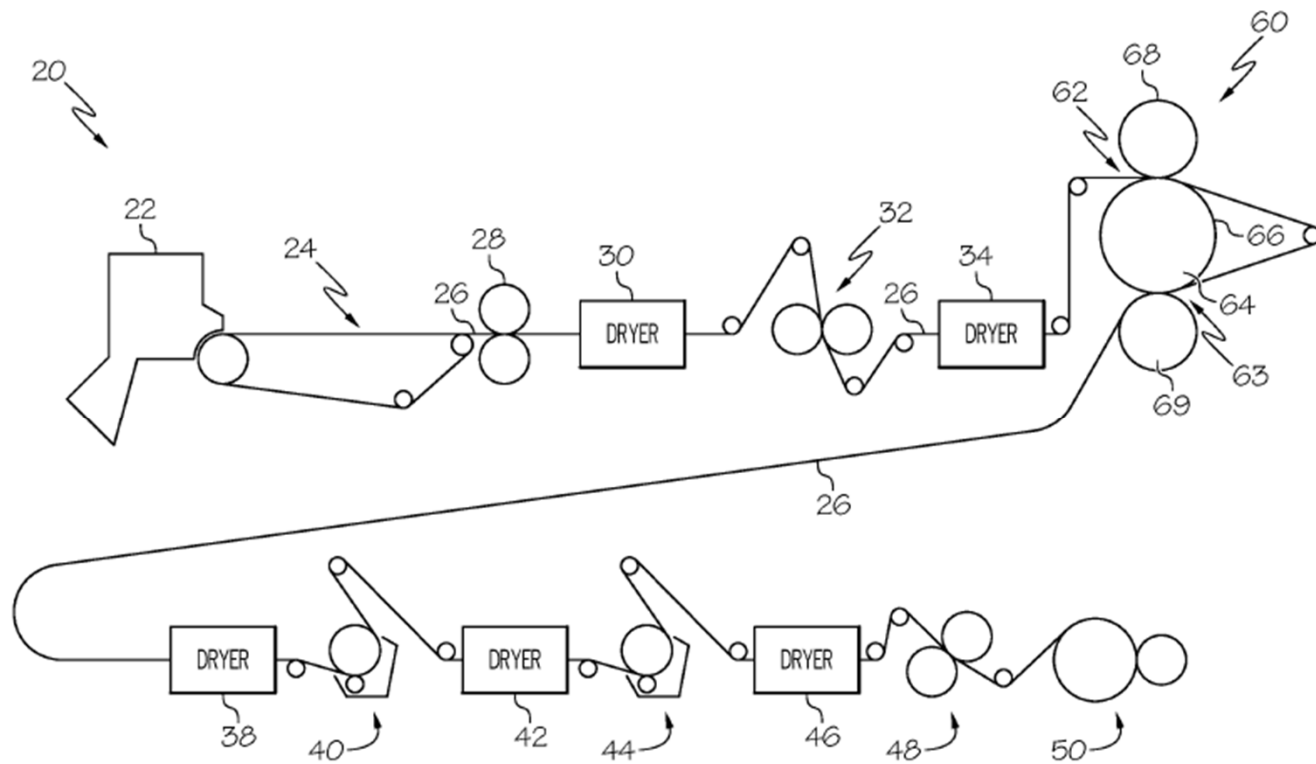


FIG. 3

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

The '142 Patent

(Paper 21, p. 7)

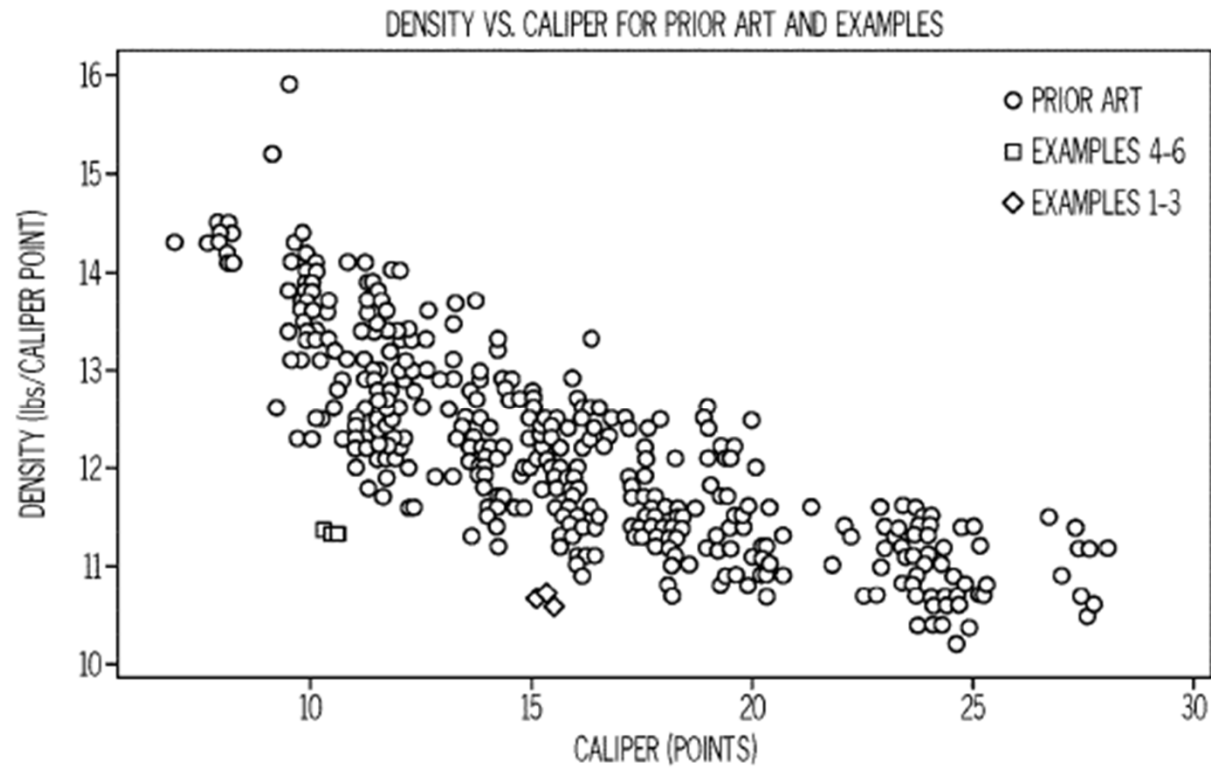


FIG. 4

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

The '142 Patent

(Exhibit 1001, Fig. 5)

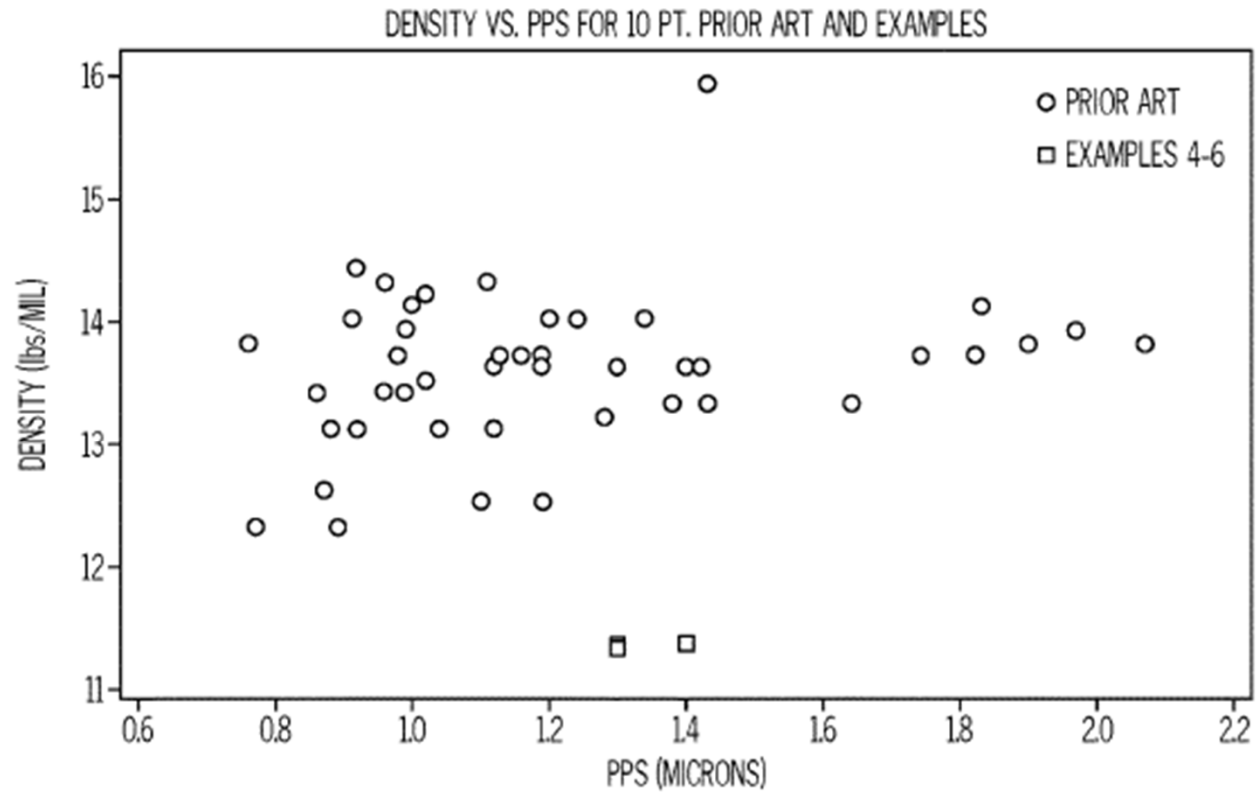


FIG. 5

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

The '142 Patent

(Exhibit 1001, Fig. 6)

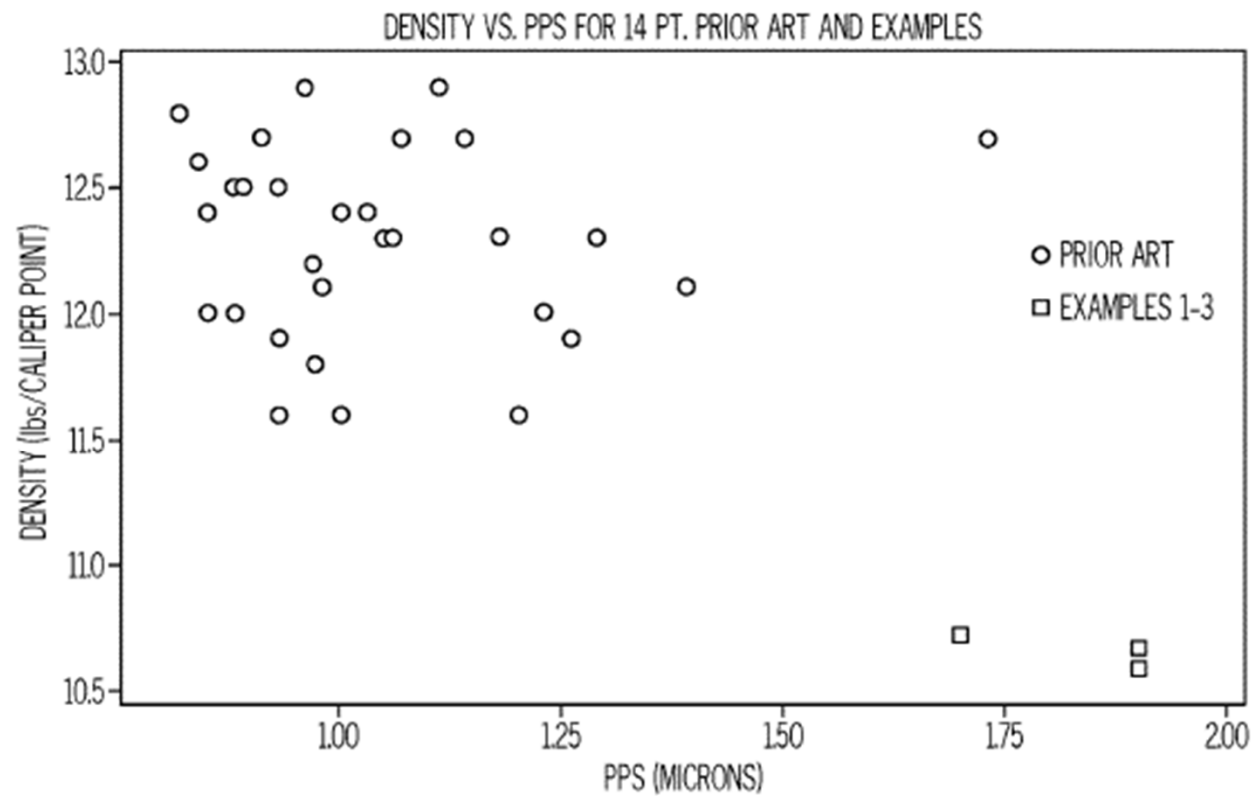


FIG. 6

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

The '142 Patent

(Paper 21, p. 8)

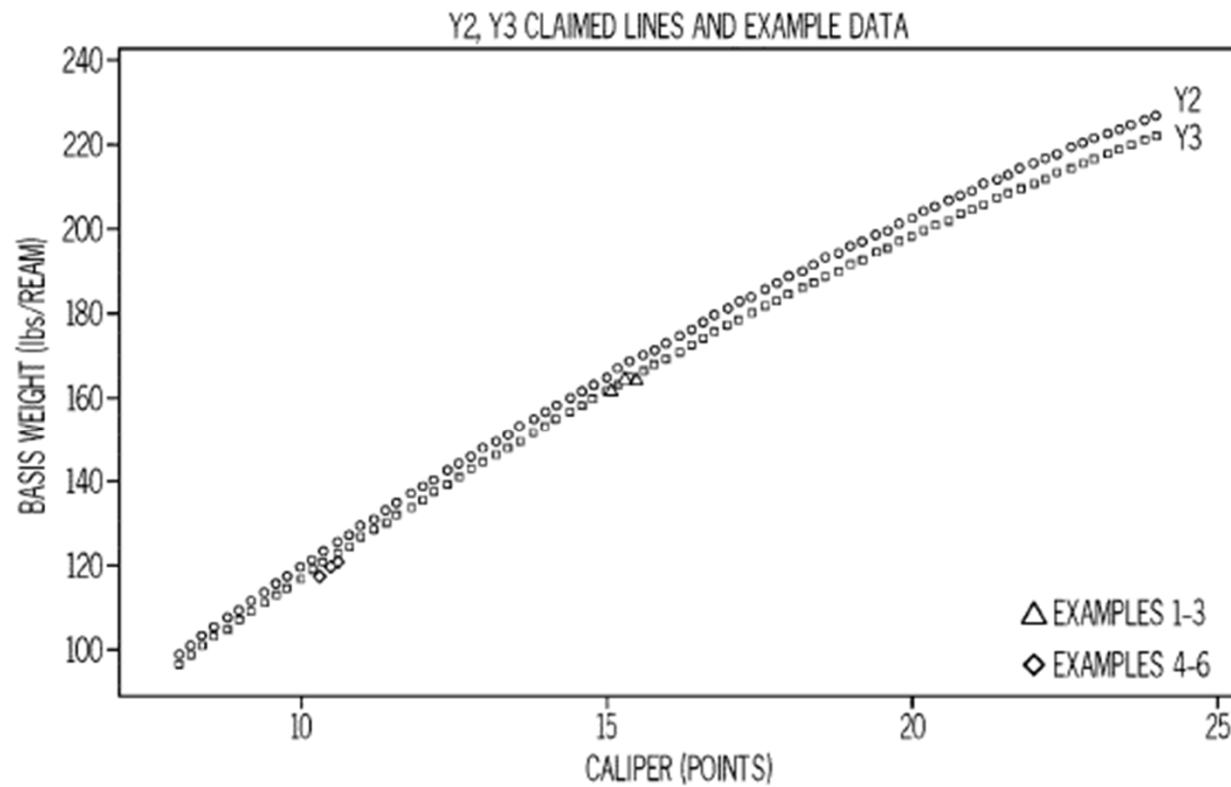


FIG. 7

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

The '142 Patent

(Paper 21, p. 8)

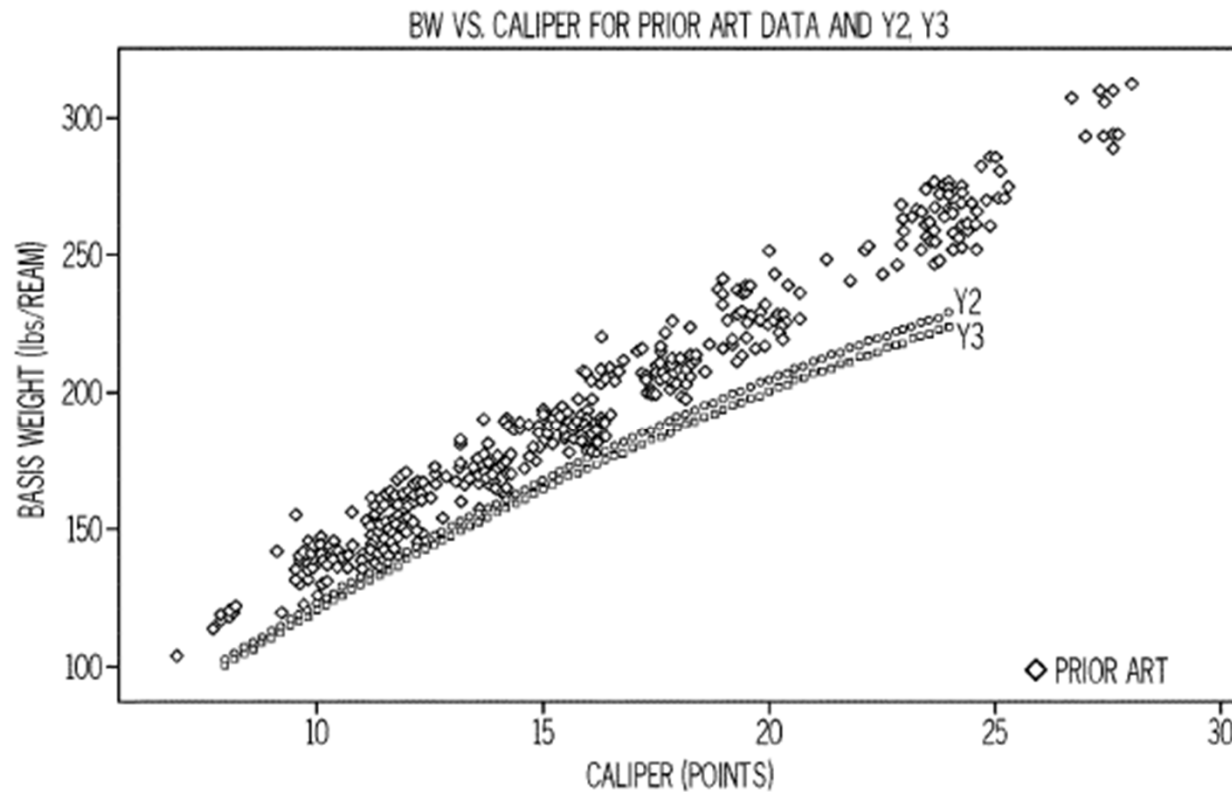


FIG. 8

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

The '142 Patent

(Exhibit 1001, Fig. 9)

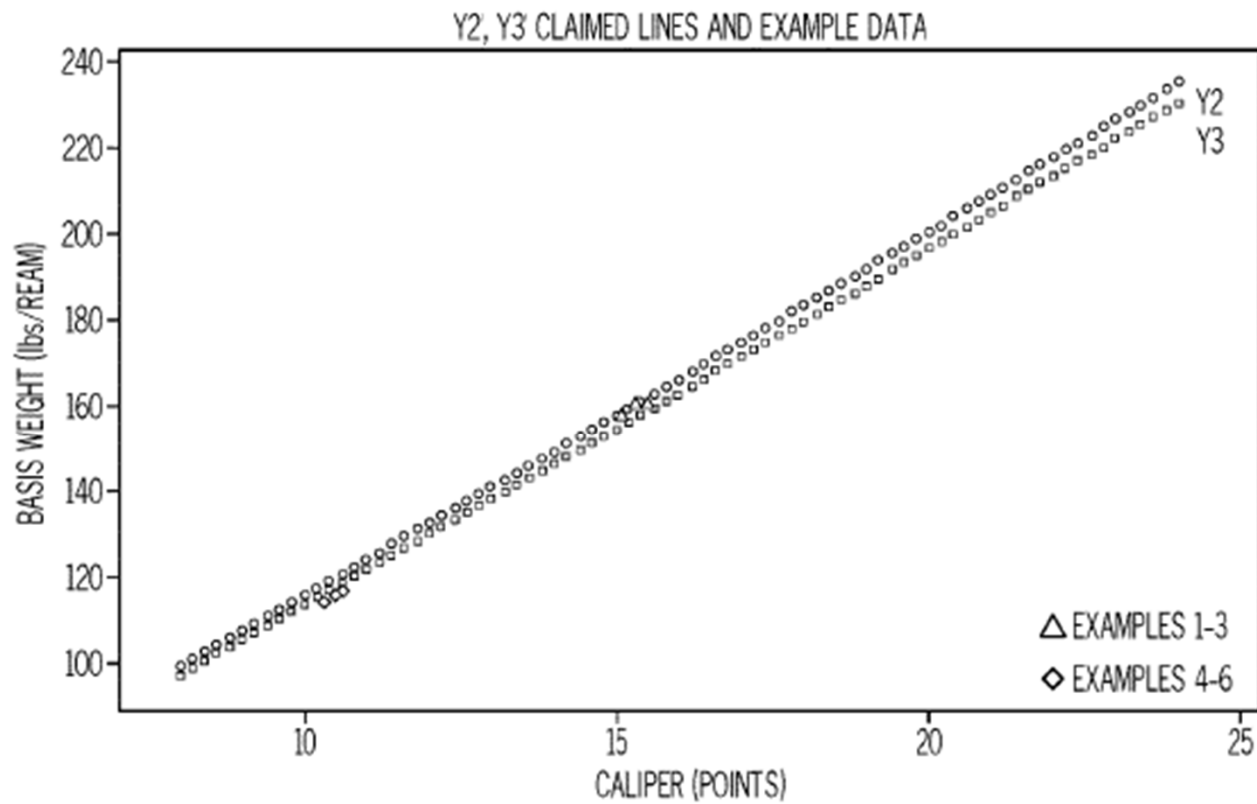
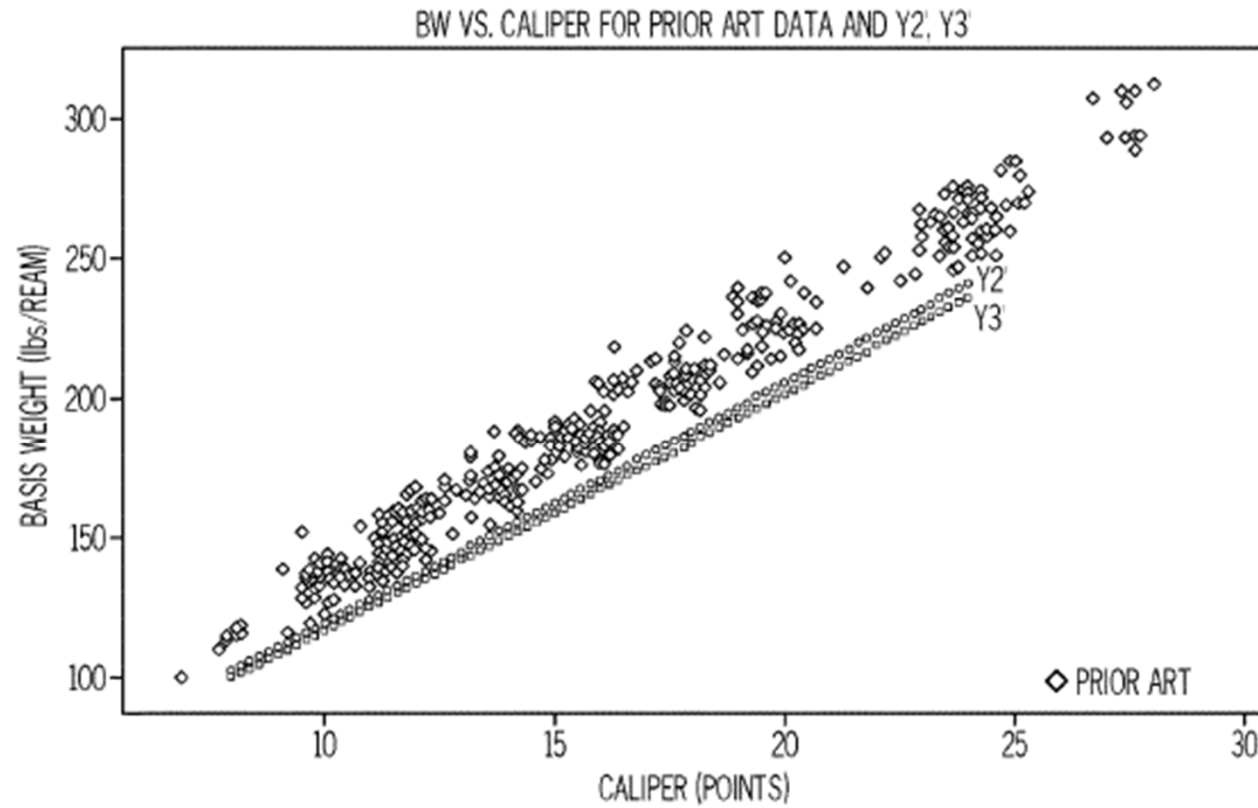


FIG. 9

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

The '142 Patent

(Exhibit 1001, Fig. 10)



DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

Claim 1 versus Cited Art

- **Claim 1 recites a method resulting in certain paperboard properties, and recites 250 °F. Ex. 1001, Col. 12, lines 33-54. Paper 13, Paper 38, p. 4-5 and Paper 13, p. 43**
- *Fugitt*, Example 3: Paperboard properties. Paper 38, p. 2-3. Ex. 1002, paragraphs [0053]-[0057].
- Maybe steam heating used. *Id.* at paragraph [0026]. Paper 14, p. 9.
- No temperature given
- ***Papermaking, Gratton, Marley, and Zakaib*, state high temperatures. Paper 38, p. 19-20.**
- **None of these references have the paperboard properties of *Fugitt* Example 3. Paper 52, p. 3.**

Claim 23 versus Cited Art

- Both of the caliper values Petitioner argued versus Claim 23 are derived from hindsight. Paper 38, p. 15-16.
- 12.2 caliper points is the result of solving the Y_3' equation for caliper points starting with *Fugitt's* 130 lbs/ream basis weight. Paper 38, p. 15.
- 14.2 caliper points, Petitioner (Zotterman) invented a hybrid SBS/FBB paperboard, derived 14.2 caliper points from that hybrid. Paper 38, p. 16.

Claim 23 versus Cited Art (Continued)

- Versus Claim 1, Petitioner used 12 caliber points from Example 3 of *Fugitt* in the Y_2 equation: $Y_2 = 3.71 + 13.14X - 0.1602X^2$. Paper 1, p. 35-36.
- Versus Claim 21, Petitioner used 12 caliber points from Example 3 of *Fugitt* in the Y_2' equation: $Y_2' = 35.55 + 8.173X - 0.01602X^2$. *Id.* at p. 51-52.
- Versus Claim 22, Petitioner used 12 caliber points from Example 3 of *Fugitt* in the Y_3 equation: $Y_3 = 3.63 + 12.85X - 0.1566X^2$. *Id.* at p. 52.
- Versus Claim 23, Petitioner used 12.2 and 14.2 caliber points (not Example 3) in the Y_3' equation: $Y_3' = 34.83 + 8.010X - 0.01570X^2$. *Id.* at p. 53-54 and Ex. 1003, ¶154-¶155.

Substitute Claim 24 (Paper 22, p. 1, Appendix A)

- a contact surface of only said thermo-roller is heated to an elevated temperature of at least 250° F,
- and wherein the counter roller is not heated to the elevated temperature,
- wherein said passing said paperboard substrate through said hot-hard calender comprises applying a nip load to said paperboard substrate ranging from about 20 pli to about 500 pli.

Petitioner's MTA Sur-reply Support for Substitute Claim 24

- Negative limitations: Petitioner confuses the standards for claim construction and the standards for new matter. Paper 43, p. 1-6, Paper 28. p. 6-7.
- “We do not today create a heightened standard for negative claim limitations. Just as disclosure is the "hallmark of written description" for positive limitations, Ariad , 598 F.3d at 1351, so too for negative limitations. ” *Novartis Pharm. Corp. v. Accord Healthcare, Inc.*, 38 F.4th 1013, 1020 (Fed. Cir. 2022) (Emphasis added). Paper 28. p. 6-7
- “While a written description's silence about a negative claim limitation is a useful and important clue and may often be dispositive, it is possible that the written description requirement may be satisfied when a skilled artisan would understand the specification as inherently disclosing the negative limitation. ” *Novartis Pharm. Corp. v. Accord Healthcare, Inc.*, 38 F.4th 1013, 1017 (Fed. Cir. 2022). *Id.*

Petitioner's MTA Sur-reply Support for Substitute Claim 24, continued

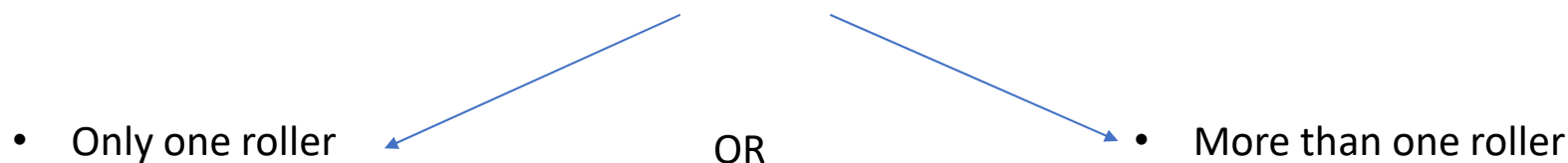
- Petitioner inexplicably treats “possible reasons to exclude” from *Novartis* as the ONLY reasons to exclude. Paper 43, p. 1.
- Substitute Claim 24 does not include a classic negative limitation, but instead a clear demarcation of what is claimed. Paper 22, p. 3, 5-6.
- In instituting this IPR, the Board has already found “possible reasons to exclude.” Paper 28, p. 5-9.
- Petitioner argued the Board erred in considering the gloss calender to be an alternative to the hot-hard calender. Paper 43, p. 2-4.

Petitioner's MTA Sur-reply Support for Substitute Claim 24, continued.

- In claim construction, Petitioner quoted Zotterman, not the '142 Patent, when arguing for a construction of "hot-hard calender" in Claim 1, "wherein at least one roller is heated to a temperature above ambient temperature." Paper 1, p. 8.
- Patent Owner argued for a different claim construction. Paper 13, p. 11-18.
- The Board has stated "Petitioner's proposed construction encompasses a calender having one or both rollers heated to an elevated temperature," Paper 14, p. 20. Emphasis added.
- The Board adopted Petitioner's claim construction. Paper 14, p. 23.
- This decision was based on the intrinsic record. *Id.*
- Patent Owner has adopted the Board's reasoning. Paper 22, p. 5.
- Both parties and the Board all agree the intrinsic record supports one or both rollers heated to an elevated temperature," Paper 14, p. 20 (Emphasis added).
- This is a universe of two possibilities.

Petitioner's MTA Sur-reply Support for Substitute Claim 24, continued.

- This is a universe of two possibilities. Paper 14, p. 20.



- In such a small universe, one of ordinary skill in the art could not miss the fact that the inventors possessed and disclosed both possibilities.
- It is too late for Petitioner to go back on this.

Petitioner's MTA Sur-reply Support for Substitute Claim 25

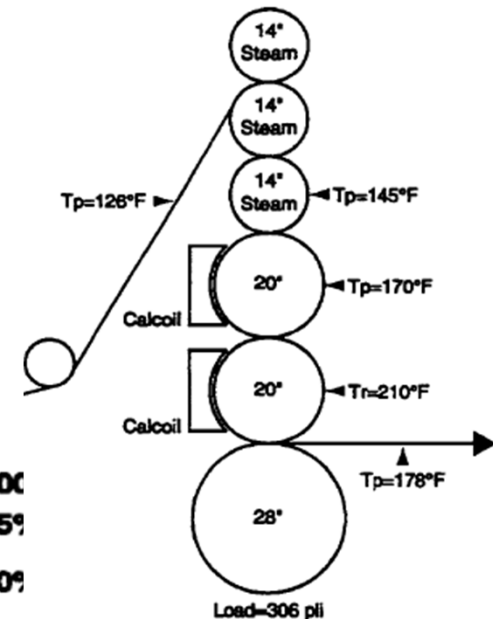
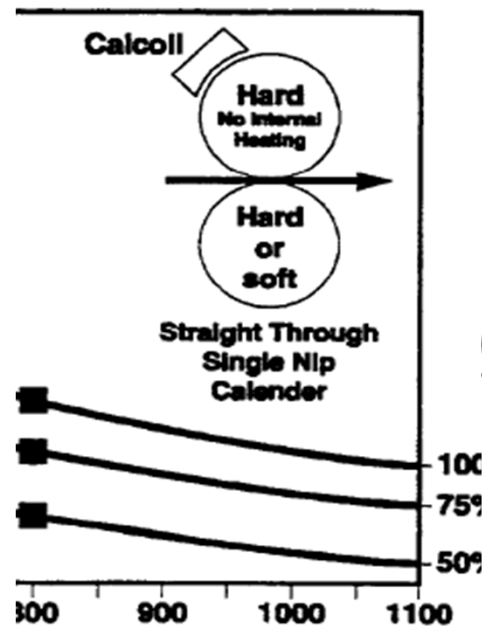
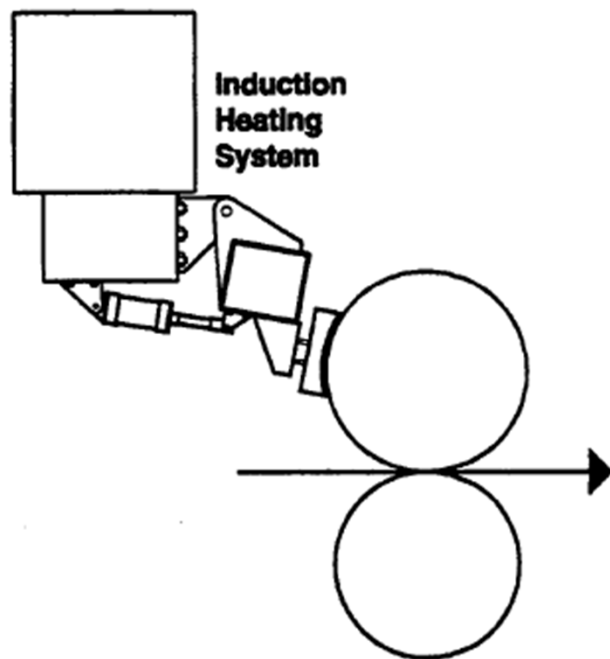
- Petitioner attempts to prove lack of support because Claim 25 is broad enough to cover a combination of low nip load of 20-90 pli with a low temperature of 250 °F. Paper 43, p. 6
- This a non-issue because Petitioner has not proven any broadening aspect in Claim 25.
- Petitioner's argument goes against a claim that Patent Owner did not present:
 - Claim 25 does not recite exactly 250 °F and 20-90 pli.
 - Claim 25 recites 250 °F or more and 20-90 pli. Paper 22, Appendix A, p. 2
- The Board has already reached the correct conclusion regarding support for Claim 25. Paper 28, p. 7-9.

Petitioner's MTA Sur-reply Prior Art and Substitute Claim 24

- Petitioner still has not provided sufficient rationale to support obviousness of replacing *Fugitt's* multi-roll calender with a two-roll hard nip calender as disclosed in *Papermaking*. Paper 43, p. 7.
- There is a temperature gap between the steam-heated multi-roll calender in *Fugitt* and the two-roll hard nip calender in *Papermaking*
 - *Fugitt* does not give a roller surface temperature, but *Papermaking* indicates steam heating goes from roller surface temperatures of 176-338 °F. Ex. 1005, p. Paper 38, p. 8
 - *Papermaking* also indicates that for a precalender with one hot hard-nip, the roll temperatures can be over 392 °F. Ex. 1010, p. 82. Paper 13, p. 43
- Petitioner still has not shown any evidence of what would happen to the smoothness, caliper, and basis weight of the paperboard in Example 3 of *Fugitt* at such high temperatures. Paper 43, p. 7.
- *Zakaib* does not teach having one and only one roll heated. Ex. 1012, 174:4-177:6. Paper 39, p. 5.

Petitioner's MTA Sur-reply Prior Art and Substitute Claim 24 (continued)

- Petitioner emphasizes single induction heating system on the top roll of a single nip calender. Paper 43, p. 9.
- *Zakaib* does not teach having one and only one roll heated. Ex. 1012, 174:4-177:6. Paper 39, p. 5.



DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

Petitioner's MTA Sur-reply Prior Art and Substitute Claim 25

- Petitioner's arguments regarding Claim 25 rely on *Marley* for the nip loading range. Paper 43, p. 10-11.
- *Marley* describes FBB. Ex. 1015, p. 17. Paper 38, p. 14
- *Fugitt*, Example 3 is for SBS. *Id.* and Ex. 1004, paragraphs [0053]-[0057].
- The surface of the roll is heated to 300°C (572 °F) far beyond the steam of *Fugitt*. Ex. 1015 p. 17. Paper 38, p. 14
- Numerically, Petitioner speculated leeway on the effect of *Marley* on *Fugitt's* smoothness, but not on *Fugitt's* caliper and basis weight. Paper 43, p. 11.
- The Board Correctly indicated Petitioner does not provide sufficient rationale for combining *Marley's* nip load range with the processes of *Fugitt* and *Papermaking*. Paper 28, p. 13.

Petitioner's MTA Sur-reply Prior Art and Substitute Claims 26-27

- In Paper 43, pages 11-12, Petitioner argued *Fugitt* is not technically limited to steam.
- The fact is nothing in the four corners of *Fugitt* contemplated other modes of heating. Paper 14, p. 26.
- The Board correctly indicated insufficient rationale for modifying *Fugitt's* process that uses steam-heated rolls with the teachings of *Papermaking* and *Marley* that disclose higher temperatures. Paper 28, p. 13-14
- Petitioner still has not shown the smoothness, caliper, and basis weight of *Fugitt*, Example 3 would be expected at temperatures as high as those in *Papermaking*, *Marley*, *Gratton*, or *Zakaib*. Paper 38, p. 19-20.

Petitioner's Second Objections/Motion to Exclude

- Petitioner contends Mr. Klass' last declaration is an attempt to "backdoor" support for Patent Owner's Sur-reply. Paper 45, p. 2.
 - Actually, the declaration is in support of Patent Owners Motion to Exclude.
 - If the declaration supports Patent Owner's sur-reply, it is incidental and unavoidable given the need to exclude improper evidence.
- Petitioner contends Patent Owner was "forced" to withdraw Mr. Klass' 3rd declaration. *Id.*
 - Actually, Patent Owner voluntarily withdrew the declaration to resolve Petitioner's objections, without prejudice to raising the arguments in the motion to exclude. Ex. 3002, p. 2. Paper 53, p. 2-3.
- Petitioner cites no rules prohibiting a supporting declaration in Patent Owner's Motion to Exclude (Paper 52, p. 2).
- The Practice Guide allows for expert testimony at appropriate stages in a proceeding as allowed by the panel overseeing the trial. *Id.*
 - In this case, the Panel has discretion to determine for itself whether Mr. Klass' latest declaration is appropriate.

Petitioner's Second Objections/Motion to Exclude, continued

- Mr. Klass' latest declaration speaks to mistakes in Petitioner's exhibits. Ex. 2012, p. 4-18. Paper 53, p. 2.
- These mistakes make Exhibits 1013, 1014 inadmissible under the rules for being misleading, confusing, wasting time etc. Paper 42, p. 8, FRE 403.
- A foundation for evidence such as Exhibits 1013, 1014 should have been established by an expert witness to avoid being misleading, confusing, and wasting time. Paper 53, p. 3
- There is no need for the Panel to rule in favor of Petitioner's Second Objections or Motion to Exclude.
- Mr. Klass' latest declaration is the only opportunity for the Panel to hear from a qualified expert from either side regarding Petitioner's Exhibits 1013, 1014. Paper 42, p. 4.
- Without Mr. Klass, Exhibits 1013, 1014 are offered as evidence from attorney argument alone. Paper 42, p. 4.
- Mr. Wirén's stated purpose in preparing Exhibits 1013, 1014 was to impeach Mr. Klass. Ex. 2011, p. 30, 42, 48. Paper 53, p. 3