IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE

DEERE & COMPANY,)
)
Plaintiff,)
)
v.) C.A. No
)
PRECISION PLANTING LLC,) JURY TRIAL DEMANDED
)
Defendant.)

COMPLAINT

Plaintiff Deere & Company ("Deere" or "Plaintiff"), hereby files this Complaint for patent infringement against Defendant, Precision Planting LLC ("Precision Planting" or "Defendant"), and states as follows:

NATURE OF LAWSUIT

- 1. This is a claim for patent infringement arising under the patent laws of the United States, Title 35 of the United States Code. Defendant infringes claims of U.S. Patent No. 8,813,663 ("the '663 patent"), U.S. Patent No. 9,480,199 ("the '199 patent"), U.S. Patent No. 9,807,922 ("the '922 Patent"), U.S. Patent No. 9,820,429 ("the '429 Patent"), U.S. Patent No. 8,850,998 ("the '998 patent"), U.S. Patent 9,699,955 ("the '955 patent"), U.S. Patent No. 9,807,924 ("the '924 Patent"), U.S. Patent No. 9,686,906 ("the '906 Patent"), U.S. Patent No. 8,671,856 ("the '856 Patent"), and U.S. Patent No. 9,661,799 ("the '799 Patent"), U.S. Patent No. 9,861,031 ("the '031 Patent"), and U.S. Patent No. 9,510,502 ("the '502 Patent") (collectively, the "Asserted Patents").
 - 2. A true and correct copy of the '663 Patent is attached as Exhibit 1.
 - 3. A true and correct copy of the '199 Patent is attached as Exhibit 2.

- 4. A true and correct copy of the '922 Patent is attached as Exhibit 3.
- 5. A true and correct copy of the '429 Patent is attached as Exhibit 4.
- 6. A true and correct copy of the '998 Patent is attached as Exhibit 5.
- 7. A true and correct copy of the '955 Patent is attached as Exhibit 6.
- 8. A true and correct copy of the '924 Patent is attached as Exhibit 7.
- 9. A true and correct copy of the '906 Patent is attached as Exhibit 8.
- 10. A true and correct copy of the '856 Patent is attached as Exhibit 9.
- 11. A true and correct copy of the '799 Patent is attached as Exhibit 10.
- 12. A true and correct copy of the '031 Patent is attached as Exhibit 11.
- 13. A true and correct copy of the '502 Patent is attached as Exhibit 12.

PARTIES

- 14. Deere is a corporation organized and existing under the laws of the State of Delaware, with its corporate headquarters and principal place of business located at One John Deere Place, Moline, Illinois 61265.
- 15. On information and belief, Precision Planting is a limited liability company organized and existing under the laws of the State of Delaware, with its headquarters and principal place of business located at 23207 Townline Road, Tremont, Illinois 61568.
- 16. On information and belief, on or about September 1, 2017, AGCO Corporation ("AGCO") acquired assets and assumed liabilities relating to the equipment business of Precision Planting, which business has engaged in the infringing activities identified herein.
- 17. Attached hereto as Exhibit 13 is a true and correct copy of a press release dated July 26, 2017 announcing the transaction referenced in Paragraph 16 above, published on Defendant's website, as it appeared on May 24, 2018.

- 18. Attached hereto as Exhibit 14 is a true and correct copy of AGCO's Form 10-Q quarterly report for the quarter ended September 30, 2017.
- 19. Attached hereto as Exhibit 15 is a true and correct copy of AGCO's Form 10-Q quarterly report for the quarter ended March 31, 2018.
- 20. As of the acquisition date, the results of operations of Precision Planting have been included in AGCO's Condensed Consolidated Financial Statements. *See* Ex. 14 at 11; Ex. 15 at 33–34.

JURISDICTION AND VENUE

- 21. Deere's claims for patent infringement against Defendant arise under the patent laws of the United States, including 35 U.S.C. §§ 271 and 281–85.
- 22. This Court has original subject matter jurisdiction over this suit pursuant to 28 U.S.C. §§ 1331 and 1338.
- 23. This Court has personal jurisdiction over Defendant consistent with the Due Process Clause of the United States Constitution and the Delaware Long-Arm Statute.
- 24. On information and belief, Defendant is a Delaware limited liability company with a registered agent in the State of Delaware located at 2711 Centerville Road, Suite 400, Wilmington, Delaware 19808. Thus, Defendant resides within, and has consented to, personal jurisdiction within this District.
- 25. In addition, Defendant has, directly or through agents, subsidiaries, or intermediaries, committed acts within Delaware giving rise to this action and/or has established minimum contacts with Delaware such that this Court's exercise of jurisdiction would not offend traditional notions of fair play and justice. On information and belief, Defendant has regularly and systematically transacted business in Delaware directly or through agents, subsidiaries, or intermediaries, and/or committed acts of patent infringement in Delaware, as alleged in this

Complaint, that will lead to foreseeable harm and injury to Deere. On information and belief, Defendant has placed, and continues to place, infringing products into the stream of commerce by shipping those products into Delaware and/or knowing that the products would be shipped into Delaware. On information and belief, Defendant has purposefully availed itself of the privilege of doing business in Delaware, and maintained such continuous and systematic contacts so as to authorize this Court's exercise of personal jurisdiction over it in this matter.

- 26. Attached hereto as Exhibit 16 is a true and correct copy of pages from Defendant's website that provide sales and contact information for dealers of Defendant's products in Delaware, as the website appeared on May 24, 2018.
- 27. On information and belief, Defendant sells infringing products through at least two dealers in Delaware: Hoober Inc., located at 1130 Middletown Warwick Road, Middletown, DE 19709, and Garey Ag Solutions, located at 2158 Prospect Church Road, Harrington, DE 19952. *See* Ex. 16 at 1.
- 28. Venue is proper in this judicial district under 28 U.S.C. §§ 1391 and 1400, at least because Defendant resides in this district by virtue of its organization under the laws of the State of Delaware, and because Defendant has committed acts of infringement and has a regular and established place of business in this district.

DEERE'S TECHNOLOGY AND INTELLECTUAL PROPERTY

29. The world's population is growing rapidly, increasing by more than 200,000 people a day. As a result, global demand for food and other agricultural products—which has already increased threefold since the mid-1960s—is expected to nearly double by 2050. In the coming years, agricultural production will need to increase rapidly to generate enough food to satisfy this growing population.

- 30. In the United States alone in 2017, over 90 million acres of corn were planted, yielding over 14 billion bushels of harvested corn. Likewise, during 2017, over 90 million acres of soybeans were planted, yielding over 4 billion bushels of harvested soybeans.
- 31. One of the most significant factors affecting the productivity of each acre planted is seed placement. When seeds are planted too close to one another in a field, the seeds compete for sunlight, water, and other resources. This competition adversely impacts growth for both plants, resulting in diminished crop yield for farmers. Conversely, when seeds are planted too far apart from one another, seed density and crop yields decrease, resulting in waste and lost sales for farmers.
- 32. Another significant factor recognized to affect productivity of farmland is planting speed. Most crops have a limited time window within which seeds must be planted in order to realize optimal crop yields. This window varies by region, crop, and year. For example, in the American Midwest the optimal planting window to maximize corn yields typically lasts for approximately three weeks between late April and early May. If seeds are planted before the optimal planting window for a given crop in a given region, low soil temperatures may prevent those seeds from germinating. If the seeds are planted too late, crops may not have enough time to mature before the first fall-killing frost.
- 33. When using equipment to plant various crops, such as corn or soybeans, farmers have historically made trade-offs between seed placement accuracy (*i.e.*, optimal spacing and depth control) and planting speed. Notably, under some common planting conditions, the accuracy of a planter's seed spacing can decline as speeds increase, resulting in lower crop yields, and lost sales for farmers.

34. Most large-scale farmers use systems called planters to sow seed. An image of the 90-foot-wide John Deere DB90 planter, which covers 36 rows with each pass, is depicted in Figure 1.



FIGURE 1

35. In a standard configuration, a tractor tows a planter toolbar, on which multiple planter row units are mounted. These row units commonly include conventional components—such as seed meters and seed tubes—for placing the seed in a furrow in the soil. For example, many models of planters that are commonly used by farmers rely on finger-pickup seed meters and gravity drop seed tubes for placing seeds, as shown in Figures 2A and 2B.

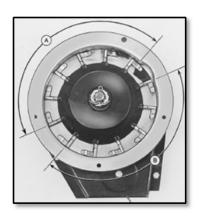




FIGURE 2A

FIGURE 2B

36. After years of research, development, and extensive testing, Deere introduced its breakthrough ExactEmerge planter in 2014 to offer farmers better performance and productivity capabilities than what was currently available with existing models of planter equipment. ExactEmerge relies on unique and innovative features that can allow growers to plant corn and soybean seeds more accurately at higher speeds (*i.e.*, up to about 10 miles per hour or more depending on planting conditions)—greatly exceeding the long-thought 5 mile-per-hour limit—while delivering accurate seed placement and spacing. With the help of ExactEmerge, farmers have been able to place seeds more accurately at faster speeds, meaning that planting time decreases, wasted field capacity decreases, and crop yields and profit margins increase. Figure 3 shows an exemplary cut-away view of the ExactEmerge planter.



FIGURE 3

37. ExactEmerge is the latest revolutionary product in Deere's nearly two hundred-year history of innovation in the planting and seeding industry. Deere's predecessor company was founded by John Deere, who opened a blacksmith shop in Grand Detour, Illinois in 1836. At that time, the industry faced different problems—the cast iron plow blades used by farmers at that time became easily clogged in the thick Midwestern soil. As a result, farmers had to stop frequently to clean the plow. Deere experimented with polishing steel plow blades, and in 1837 introduced the self-scouring plow, a simple curved blade that allowed soil to drop off easily. This plow was pivotal in opening the American Midwest to high-production agriculture. Demand for Deere's innovative plow soon outpaced his backyard blacksmith shop, and the John Deere Company was born. By 1849, the John Deere Company was producing over 2,000 plows a year.

- 38. Today, Deere remains as committed to finding innovative and groundbreaking solutions to difficult problems as it was in 1837. Deere spends billions of dollars on research and development and capital expenditures, demonstrating Deere's continuing commitment to advanced products, new technologies, and efficient manufacturing.
- 39. Deere has received widespread acclaim for its engineering and technological achievements, including its ExactEmerge planter. For example, in 2016, Deere received fifteen separate AE50 awards—more than one-quarter of all awards that year—presented for innovation and engineering advancement by the American Society of Agricultural and Biological Engineers (ASABE), a leading engineering society in the agricultural field. Deere repeated this performance in 2017, receiving 10 separate AE50 awards, and in 2018, receiving 9 separate AE50 awards. Deere's ExactEmerge planter received its own AE50 award in 2015, with the ASABE touting ExactEmerge as "the most highly productive row unit in the industry with an exclusive seed delivery system that plants at speeds up to 16 kph (10 mph)."
- 40. Deere's innovative ExactEmerge planter has also been recognized by numerous additional awards. For instance, in 2014, members of the ExactEmerge team were recognized by the ASABE Quad City Section with the Outstanding Engineering Achievement Award. The Section newsletter described how the "highly innovative design" of ExactEmerge "break[s] the planting speed and accuracy barriers of traditional row-crop planting with the development of a revolutionary new seed delivery system giving corn and soybean producers the ability to plant at speeds up to 10 mph while maintaining superior seed placement."
- 41. Industry praise for ExactEmerge continued in 2015. Deere won three awards at the SIMA 2015 Paris International Agri Business Show, including a gold innovation award for

ExactEmerge. ExactEmerge was also one of twenty products honored by Farm Industry News as a 2015 FinOvation Award winner.

- 42. In 2016, ExactEmerge received a Technical Innovation award at the FIMA International Fair of Agricultural Machinery.
- 43. Even this year, ExactEmerge has continued to receive international recognition of its innovative design, winning a silver medal at the TechAgro 2018 Grand Prix Innovation Awards.
- 44. Deere's planting equipment has achieved significant commercial success. Deere is the leading seller of new planters in the United States, and Deere's ExactEmerge technology has been responsible for a significant portion of this success.
- 45. Consistent with its tradition of innovation, Deere has been granted thousands of U.S. patents on its products, covering countless inventions in fields ranging from agricultural equipment (such as ExactEmerge), to construction equipment, to computer software and networking.
- 46. Among Deere's many innovations are those disclosed and claimed in the Asserted Patents.
- 47. The Asserted Patents describe several of the unique and inventive aspects of Deere's planter row units, many of which are embodied in the state-of-the-art ExactEmerge technology. The inventions described in and protected by the Asserted Patents can allow farmers to achieve more accurate seed placement, even emergence, and more uniform seed spacing while planting at higher speeds, thereby helping to minimize waste and maximize production yields by making it easier to complete planting jobs within the optimal planting season window.

- 48. For example, the Asserted Patents relate to "[a]n agricultural seeding machine such as a row crop planter or grain drill [that] places seeds at a desired depth within a plurality of parallel seed trenches formed in soil." Ex. 1 at 1:18–21; *see also, e.g.*, Ex. 2 at 1:20–22; Ex. 3 at 1:20–22; Ex. 4 at 1:20–22; Ex. 5 at 1:7–10; Ex. 6 at 1:20–22; Ex. 7 at 1:20–22; Ex. 8 at 1:20–22; Ex. 9 at 1:17–19; Ex. 10 at 14–16; Ex. 11 at 1:20–22; Ex. 12 at 1:18–20.
- 49. As described by the Asserted Patents, "[t]he mechanisms associated with metering and placing the seeds generally can be divided into a *seed metering system* and a *seed placement system* which are in series communication with each other." Ex. 1 at 1:34–37 (emphasis added); *see also*, *e.g.*, Ex. 2 at 1:35–38; Ex. 3 at 1:35–38; Ex. 4 at 1:35–38; Ex. 5 at 1:37–42; Ex. 6 at 1:35–38; Ex. 7 at 1:35–38; Ex. 8 at 1:35–38; Ex. 9 at 1:46–51; Ex. 10 at 1:46–51; Ex. 11 at 1:35–38; Ex. 12 at 1:50–55.
- 50. The Asserted Patents describe that "[t]he seed metering system receives the seeds in a bulk manner from the seed hopper carried by the planter frame or by the row unit." Ex. 1 at 1:37–39; *see also*, *e.g.*, Ex. 2 at 1:38–40; Ex. 3 at 1:38–40; Ex. 4 at 1:38–40; Ex. 5 at 3:13–17; Ex. 6 at 1:38–40; Ex. 7 at 1:38–40; Ex. 8 at 1:38–40; Ex. 9 at 1:22–26; Ex. 10 at 1:20–24; Ex. 11 at 1:38–40; Ex. 12 at 1:24–28.
- 51. The Asserted Patents describe that "[t]he most common seed delivery system may be categorized as a gravity drop system," Ex. 1 at 1:50–51; *see also*, *e.g.*, Ex. 2 at 1:52–53; Ex. 3 at 52–53; Ex. 4 at 1:52–53; Ex. 5 at 1:37–40; Ex. 6 at 1:52–53; Ex. 7 at 1:52–53; Ex. 8 at 1:52–53; Ex. 9 at 1:46–49; Ex. 10 at 1:46–49; Ex. 11 at 1:52–53; Ex. 12 at 1:50–53, in which "seeds from the seed metering system merely drop into the seed tube and fall via gravitational force from a discharge end thereof into the seed trench." Ex. 1 at 1:53–56; *see also*, *e.g.*, Ex. 2 at

1:55–58; Ex. 3 at 1:55–58; Ex. 4 at 1:55–58; Ex. 5 at 1:37–40; Ex. 6 at 1:55–58; Ex. 7 at 1:55–58; Ex. 8 at 1:55–58; Ex. 9 at 1:46–49; Ex. 10 at 1:46–49; Ex. 11 at 1:55–58; Ex. 12 at 1:50–53.

- 52. However, as described by the Asserted Patents, "[u]ndesireable variation in resultant in-ground seed spacing can be attributed to differences in how individual seeds exit the metering system and drop through the seed tube. The spacing variation is exacerbated by higher travel speeds through the field which amplifies the dynamic field conditions. Further seed spacing variations are caused by the inherent relative velocity difference between the seeds and the soil as the seeding machine travels through a field. This relative velocity difference causes individual seeds to bounce and tumble in somewhat random patterns as each seed comes to rest in the trench." Ex. 1 at 1:60–2:3; *see also, e.g.*, Ex. 2 at 1:62–2:5; Ex. 3 at 1:62–2:5; Ex. 4 at 1:62–2:5; Ex. 5 at 1:37–51; Ex. 6 at 1:62–2:5; Ex. 7 at 1:62–2:5; Ex. 8 at 1:62–2:5; Ex. 9 at 1:46–58; Ex. 10 at 1:46–60; Ex. 11 at 1:62–2:5; Ex. 12 at 1:50–62.
- 53. To address this problem, the Asserted Patents describe "a seed delivery system that removes the seed from the seed meter by capturing the seed. The delivery system then moves the seed down to a lower discharge point and accelerates the seed rearward to a horizontal velocity approximately equal to the forward travel speed of the seeding machine such that the seed, when discharged, has a low or zero horizontal velocity relative to the ground. Rolling of the seed in the trench is reduced as a result of the near zero horizontal velocity relative to the ground." Ex. 1 at 2:23–32; *see also, e.g.*, Ex. 2 at 2:25–34; Ex. 3 at 25–34; Ex. 4 at 2:25–34; Ex. 5 at 9:6–14; Ex. 6 at 2:25–34; Ex. 7 at 2:25–45; Ex. 8 at 2:25–34; Ex. 9 at 9:20–28; Ex. 10 at 9:28–36; Ex. 11 at 2:25–34; Ex. 12 at 9:34–42.
 - 54. For example, Figure 2 of the '663 Patent appears as Figure 4 below:

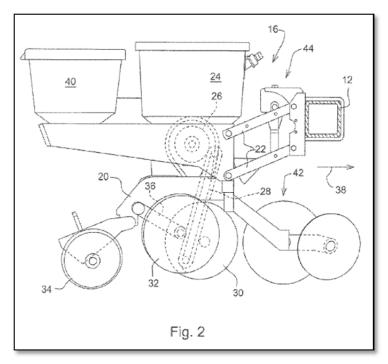


FIGURE 4

Ex. 1 at Fig. 2. The other Asserted Patents contain similar disclosures. *See also*, *e.g.*, Ex. 2 at Fig. 2; Ex. 3 at Fig 2; Ex. 4 at Fig. 2; Ex. 5 at Figs. 1–2; Ex. 6 at Fig. 2; Ex. 7 at Fig. 2; Ex. 8 at Fig. 2; Ex. 9 at Figs. 1–2; Ex. 10 at Figs. 1–2; Ex. 11 at Fig. 2; Ex. 12 at Figs. 1–2.

- 55. As disclosed in the '663 Patent with reference to Figure 2, "[a] row unit 16 is shown in greater detail in FIG. 2. . . . Seed is stored in seed hopper 24 and provided to a seed meter 26. Seed meter 26 is of the type that uses a vacuum disk From the seed meter 26 the seed is carried by a delivery system 28 into a planting furrow, or trench, formed in the soil The toolbar and row unit are designed to be moved over the ground in a forward working direction identified by arrow 38." Ex. 1 at 3:9–26; *see also*, *e.g.*, Ex. 2 at 3:13–30; Ex. 3 at 3:14–32; Ex. 4 at 3:13–32; Ex. 5 at 3:8–21; Ex. 6 at 3:14–32; Ex. 7 at 3:14–32; Ex. 8 at 3:14–32; Ex. 9 at 3:19–33; Ex. 10 at 3:20–33; Ex. 11 at 3:14–32; Ex. 12 at 3:27–40.
 - 56. Additionally, Figure 3 of the '663 Patent appears as Figure 5 below:

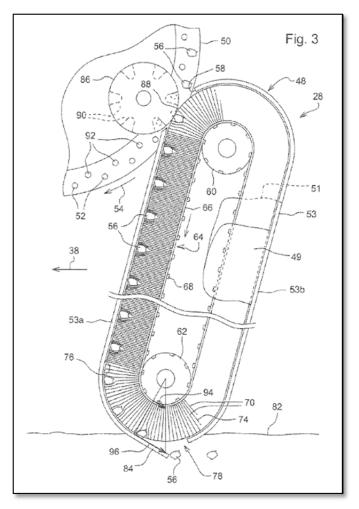


FIGURE 5

Ex. 1 at Fig. 3. The other Asserted Patents contain similar disclosures. *See also, e.g.*, Ex. 2 at Fig. 3; Ex. 3 at Fig. 3; Ex. 4 at Fig. 3; Ex. 5 at Figs. 6, 10–12; Ex. 6 at Fig. 3; Ex. 7 at Fig. 3; Ex. 8 at Fig. 3; Ex. 9 at Figs. 6, 10–12; Ex. 10 at Figs. 6, 10–12; Ex. 11 at Fig. 3; Ex. 12 at Figs. 6, 10–12.

57. As disclosed in the '663 Patent with reference to Figure 3, "the seed delivery system 28... includes a housing 48 position adjacent the seed disk 50 of the seed meter. The seed disk 50 is a generally flat disk with a plurality of apertures 52... Seeds 56 are collected on the apertures from a seed pool and adhere to the disk by air pressure differential..." Ex. 1 at 3:34–40; *see also, e.g.*, Ex. 2 at 3:38–44; Ex. 3 at 3:40–46; Ex. 4 at 3:40–46; Ex. 5 at 3:57–

- 4:21; Ex. 6 at 3:40–46; Ex. 7 at 3:40–46; Ex. 8 at 3:40–46; Ex. 9 at 4:1–32; Ex. 10 at 4:3–34; Ex. 11 at 3:40–46; Ex. 12 at 4:9–40.
- "An upper opening 58 in the housing side wall 53 admits the seed from the metering disk 50 into the housing. A pair of pulleys 60, 62 are mounted inside the housing 48. The pulleys support a belt 64 for rotation within the housing. . . . A lower housing opening 78 is formed in the side wall 53 and is positioned as close to the bottom 80 of the seed trench as possible. . . . The housing side wall forms an exit ramp 84 at the lower opening 78." Ex. 1 at 3:47–62; *see also*, *e.g.*, Ex. 2 at 3:52–67; Ex. 3 at 3:52–4:2; Ex. 4 at 3:52–4:2; Ex. 5 at 5:43–60; Ex. 6 at 3:52–4:2; Ex. 7 at 3:52–4:2; Ex. 8 at 3:52–4:2; Ex. 9 at 5:54–6:4; Ex. 10 at 5:58–6:9; Ex. 11 at 3:54–4:2; Ex. 12 at 5:64–6:15.
- 59. The '663 Patent also discloses "a loading wheel 86 provided adjacent the upper opening 58" Ex. 1 at 3:63–64; *see also*, *e.g.*, Ex. 2 at 4:1–2; Ex. 3 at 4:3–4; Ex. 4 at 4:3–4; Ex. 5 at 6:32–67; Ex. 6 at 4:3–4; Ex. 7 at 4:3–4; Ex. 8 at 4:3–4; Ex. 9 at 6:44–7:12; Ex. 10 at 6:49–7:18; Ex. 11 at 4:3–4; Ex. 12 at 6:55–7:25.
- 60. "The seeds are transferred from the seed meter to the delivery system as the seeds are brought by the disk into the nip 88." Ex. 1 at 4:16–18; *see also, e.g.*, Ex. 2 at 4:21–23; Ex. 3 at 4:23–25; Ex. 4 at 4:23–25; Ex. 5 at 5:61–6:6; Ex. 6 at 4:23–25; Ex. 7 at 4:23–25; Ex. 8 at 4:23–25; Ex. 9 at 6:5–18; Ex. 10 at 6:10–22; Ex. 11 at 4:23–25; Ex. 12 at 6:16–28.
- 61. "With the delivery system 28, the seed is captured by the delivery system to remove the seed from the seed meter. The seed is then moved by the delivery system to the seed discharge point where the seed is accelerated in a rearward horizontal direction to the housing. From the seed meter to the discharge, the seed travel is controlled by the delivery system, thus maintaining the seed spacing relative to one another." Ex. 1 at 5:4–11; *see also, e.g.*, Ex. 2 at

5:11–18; Ex. 3 at 5:13–20; Ex. 4 at 5:13–20; Ex. 5 at 8:57–9:5; Ex. 6 at 5:13–20; Ex. 7 at 5:13–20; Ex. 8 at 5:13–20; Ex. 9 at 9:4–19; Ex. 10 at 9:12–27; Ex. 11 at 5:13–20; Ex. 12 at 9:18–33.

THE INFRINGING PRECISION PLANTING PRODUCTS

- 62. Defendant—unlike Deere—does not sell complete, fully operational planters. Rather, Defendant sells aftermarket, component products that are designed to be retrofitted onto existing equipment sold by planter manufacturers.
- 63. On information and belief, Precision Planting manufactures parts designed to be installed on planters manufactured by Deere, AGCO, and others.
- 64. On information and belief, Precision Planting (or its affiliate/parent) has entered into agreements allowing AGCO and others to install certain Precision Planting parts on certain of their new planters, for example, under the White Planters brand.
- 65. On information and belief, in 2015, Precision Planting's U.S. sales for planterrelated equipment were approximately \$100 million.
- 66. In the first quarter of 2018, sales of Precision Planting equipment were reported as \$61.2 million by AGCO in its quarterly report.
- 67. Defendant designs, develops, manufactures, and markets the vSet Classic and vSet 2 products (collectively, "vSet Products").
- 68. Attached hereto as Exhibit 17 is a true and correct copy of pages from Defendant's website that describe the vSet Products, as the website appeared on May 24, 2018.
- 69. Attached hereto as Exhibit 18 is a true and correct copy of Defendant's publication titled "Tech Bulletin: vSet 2 Features and Comparison with vSet Classic," published on Defendant's website, as it appeared on May 24, 2018.

70. On information and belief, Defendant's vSet Products are seed meters, also called seed metering systems. Defendant's vSet Products are shown below in Figure 6. *See, e.g.*, Ex. 18 at 2, 5.



71. On information and belief, Defendant's vSet Products feature "disks" that are "designed with special pockets that load the disk completely" with seed. Ex. 17 at 4. The disks included in Defendant's vSet Products are shown in Figure 7. *Id*.



FIGURE 7

72. On information and belief, Defendant's vSet Products are designed and configured to meter a variety of plant seed and beans. For example, Figure 8A shows the vSet Products metering corn seed, and Figure 8B shows the vSet Products metering soy beans. *See* Ex. 17 at 3 (video embedded on webpage).





FIGURE 8A

FIGURE 8B

73. On information and belief, Defendant's vSet Products receive seeds from a seed hopper and, with the assistance of seed disks configured for use with a vacuum source, isolate individual seeds for further processing and planting.

- 74. Defendant also designs, develops, manufactures, and markets the SpeedTube product (hereinafter, "SpeedTube").
- 75. Attached hereto as Exhibit 19 is a true and correct copy of pages from Defendant's website that describe the SpeedTube product, as the website appeared on May 24, 2018.
- 76. Defendant's SpeedTube product is a seed delivery system that "control[s] the seed all the way from the meter disk to the furrow" Ex. 19 at 6. Defendant's SpeedTube product is shown below in Figure 9. *Id.* at 2.

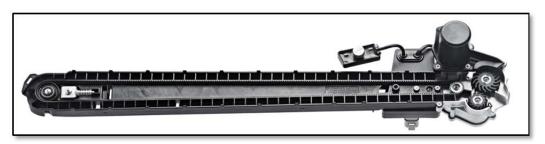


FIGURE 9

77. Defendant states that "[f]eeder wheels at the top of the SpeedTube grab the seed from the disk and deposit it into a flighted belt that controls the seed all the way to the bottom of the trench." Ex. 19 at 3. For example, as shown in Figure 10, this operation is shown on Defendant's website for its SpeedTube product. *Id.* at 3.



FIGURE 10

- 78. Attached hereto as Exhibit 20 is a true and correct copy of Defendant's SpeedTube Operations Manual, as it appeared on May 24, 2018.
- 79. Defendant also states that when the SpeedTube product is to be used for soybean planting, a "soybean deflector" may be installed. For example, as shown in Figure 11, this operation is shown in the SpeedTube Operations Manual on Defendant's website. Ex. 20 at 14.

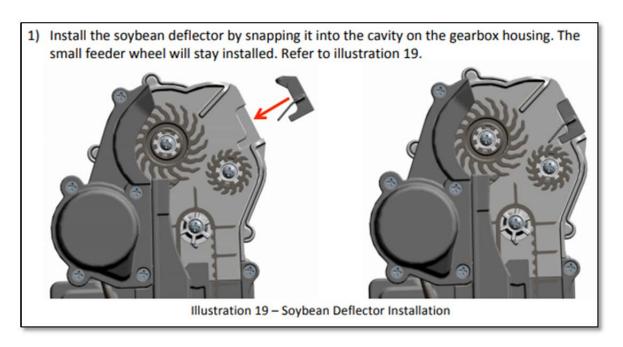


FIGURE 11

80. Defendant further states that "[t]he belt matches the speed of the planter and carries the seed to the bottom of the trench. SpeedTube doesn't rely on gravity to get the seed in the right place. It controls the seed from meter to furrow." Ex. 19 at 4. For example, as shown in Figure 12, this operation is shown on Defendant's website for its SpeedTube product. *Id*.



FIGURE 12

81. Additionally, Defendant further states that "[t]he belt spins at a rate that increases and decreases with planter speed, so you get optimal seed placement. Planting is consistent, regardless of planter speed. There is no bounce or roll in the trench. Spacing accuracy and yield are preserved." Ex. 19 at 5. For example, as shown in Figure 13, this operation is shown on Defendant's website for its SpeedTube product. *Id*.

Release It

The belt spins at a rate that increases and decreases with planter speed, so you get optimal seed placement. Planting is consistent, regardless of planter speed. There is no bounce or roll in the trench. Spacing accuracy and yield are preserved.



FIGURE 13

82. Moreover, Defendant states that SpeedTube enables users to "[p]lant two times faster without sacrificing accuracy," and that "[p]owered with a 12 volt motor and integrated controller and seed sensor, SpeedTube has a belt that spins at a rate that changes with planter speed. By eliminating seed roll, you get optimal seed placement while planting at two times the speed you've planted in the past." Ex. 19 at 5. For example, as shown in Figure 14, this operation is described on Defendant's website for its SpeedTube product. *Id*.

SpeedTube engineering, capabilities, and results in the field.



Get total spacing control, meter to furrow, faster.

Plant two times faster without sacrificing accuracy.

Planting time is limited and critical. Larger planters are not the answer to growing farm sizes. The high speed planter of tomorrow is in your shed, today — because now there's SpeedTube.

Powered with a 12 volt motor and integrated controller and seed sensor, SpeedTube has a belt that spins at a rate that changes with planter speed. By eliminating seed roll, you get optimal seed placement while planting at two times the speed you've planted in the past.

FIGURE 14

83. Defendant also states that "[g]ravity is taken out of the equation with SpeedTube," and that "[b]y controlling the seed all the way from the meter disk to the furrow, the problem is solved. Feeder wheels at the top of the SpeedTube grab the seed from the disk and deposit it into a flighted belt that controls the seed all the way to the bottom of the trench." Ex. 19 at 6. For example, as shown in Figure 15, this operation is described on Defendant's website for its SpeedTube product. *Id*.



FIGURE 15

84. Defendant's website also demonstrates that the SpeedTube is configured to operate at a variety of different seeding speeds. For example, as shown in Figures 16A and 16B, the SpeedTube is configured to operate at a two different seeding speeds. Ex. 19 at 6 (video embedded on webpage).

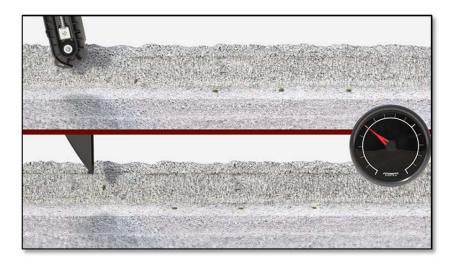


FIGURE 16A

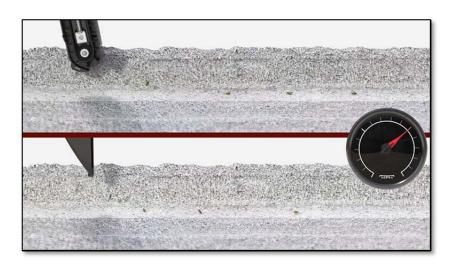


FIGURE 16B

- 85. On information and belief, Defendant's vSet Products are specifically configured to work in combination with Defendant's SpeedTube product.
- 86. When one of Defendant's vSet Products is combined with Defendant's SpeedTube product, the combination infringes Deere's patents, as described more fully below, and is referred to as an "Accused Infringing Product."
- 87. For example, as shown in Figure 17, the vSet Products and the SpeedTube product are designed to be combined in a planter. Ex. 19 at 1.

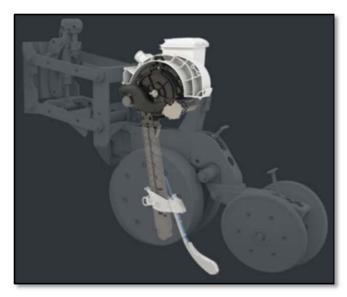


FIGURE 17

- 88. Additionally, on information and belief, Defendant instructs its customers to combine the vSet Products with the SpeedTube product.
- 89. Attached hereto as Exhibit 21, is a true and correct copy of Defendant's publication titled "CASE 12XX Row Unit Kit Installation Manual," published on Defendant's website, as it appeared on May 24, 2018.
- 90. For example, as shown in Figure 18, Defendant expressly instructs users to combine and "align" its vSet Products and its SpeedTube product. *Id.* at 7.

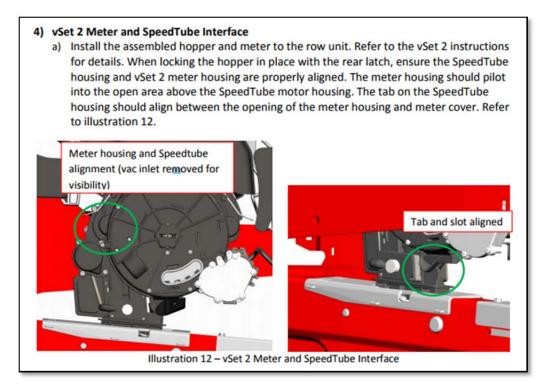


FIGURE 18

- 91. On information and belief, Defendant has been, and is still, acting alone and/or in combination with AGCO, without authority, making, using, selling, offering for sale and/or importing the Accused Infringing Products that fall within the scope of the Asserted Patents.
- 92. On information and belief, Defendant has been, and is still, acting alone and/or in combination with AGCO, without authority, selling and/or providing the Accused Infringing Products that fall within the scope of the Asserted Patents, directly and/or indirectly, to third parties, including, but not limited, to end users, customers, dealers, distributors, and/or resellers (collectively, "Downstream Parties").
- 93. Additionally, on information and belief, Defendant has been, and is still, acting alone and/or in combination with AGCO, without authority, selling and/or providing related products to the Downstream Parties, including, but not limited to, Defendant's vDrive system,

mSet components, Ready Row Unit, 20|20 product, 20/20 SeedSense display, Row Unit Modules (RUM), and SRM Architecture for use with the Accused Infringing Products.

94. On information and belief, Defendant has been, and is still, acting alone and/or in combination with AGCO, marketing and selling the Accused Infringing Products that fall within the scope of the Asserted Patents throughout the United States, including in the State of Delaware.

COUNT I: INFRINGEMENT OF U.S. PATENT NO. 8,813,663

- 95. Deere re-alleges paragraphs 1 through 94, which are incorporated herein by reference.
- 96. The '663 Patent, entitled "Seeding Machine with Seed Delivery System" and naming Elijah B. Garner, Daniel B. Thiemke, David J. Rylander, Nathan A. Mariman, and Michael E. Friestad as its inventors, was duly and legally issued on August 26, 2014. Since that date, Deere has been and is still the owner and possessor of all rights pertaining to the '663 Patent.
- 97. On information and belief, the '663 Patent is valid, enforceable, and currently in full force and effect.
 - 98. Exemplary independent claim 1 of the '663 Patent recites the following:
 - 1. A seeding machine, comprising:
 - a seed meter having a metering disk with a plurality of apertures in a circular array adapted to adhere seeds to the metering disk to move the seeds along a seed path as the metering disk rotates;
 - a seed delivery system associated with said seed meter, said seed delivery system including:
 - a housing for seed from said metering disk, the housing having a lower opening through which seed is discharged;
 - a single endless member within said housing disposed around a first drive pulley and a second idler pulley, said endless member engaging seed from the seed meter and moving the seed to said lower opening where seed is discharged from said

housing; and

- a loading wheel engaging seeds adhered to the metering disk and moving along the seed path and guiding the seed into the single endless member whereby the single endless member moves the seed to the lower opening.
- 99. On information and belief, the Accused Infringing Products infringe at least claim 1 of the '663 Patent.
- 100. On information and belief, to the extent the preamble of claim 1 of the '663 Patent is considered to be a limitation, the Accused Infringing Products comprise a seeding machine. For example, the Accused Infringing Products comprise a seeding machine, as shown in Figure 19.

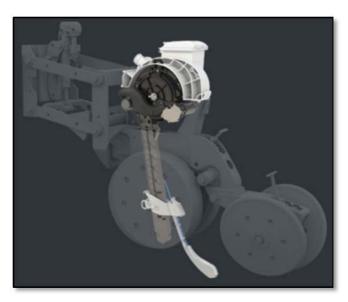


FIGURE 19

101. On information and belief, the Accused Infringing Products comprise a seed meter having a metering disk with a plurality of apertures in a circular array adapted to adhere seeds to the metering disk to move the seeds along a seed path as the metering disk rotates. For example, the vSet Products comprise seed meters having a metering disk that includes a plurality of apertures in a circular array, as shown in Figure 20.

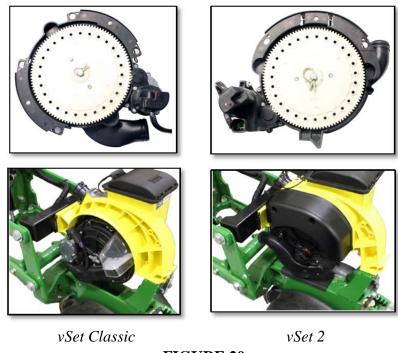


FIGURE 20

Additionally, for example, vSet Products comprise seed meters having a metering disk adapted to adhere seeds to the metering disk to move seeds along a seed path as the metering disk rotates, as shown in Figures 21A and 21B.



FIGURE 21A



FIGURE 21B

102. On information and belief, the Accused Infringing Products comprise a seed delivery system associated with said seed meter. For example, the SpeedTube product comprises a seed delivery system associated with said seed meter, as shown in Figure 22.

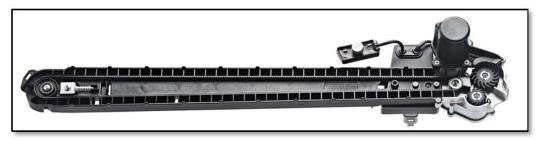


FIGURE 22

103. On information and belief, the Accused Infringing Products comprise a seed delivery system including a housing for seed from said metering disk, the housing having a lower opening through which seed is discharged. For example, the SpeedTube product is a seed delivery system that has a housing for seed from the metering disk, the housing having a lower opening through which seed is discharged, as shown in Figure 23.



FIGURE 23

104. On information and belief, the Accused Infringing Products comprise a seed delivery system including a single endless member within said housing disposed around a first

drive pulley and a second idler pulley, said endless member engaging seed from the seed meter and moving the seed to said lower opening where seed is discharged from said housing. For example, the SpeedTube product is a seed delivery system including a single endless member within the housing disposed around a first drive pulley and a second idler pulley, as shown in Figure 24.

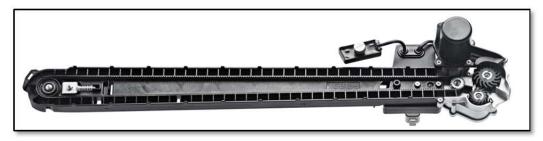


FIGURE 24

105. Additionally, for example, the endless member engages seed from the seed meter and moves the seed to said lower opening where seed is discharged from the housing, as shown in Figure 25.



FIGURE 25

106. On information and belief, the Accused Infringing Products comprise a seed delivery system including a loading wheel engaging seeds adhered to the metering disk and

moving along the seed path and guiding the seed into the single endless member whereby the single endless member moves the seed to the lower opening. For example, the SpeedTube product is a seed delivery system including a loading wheel engaging seeds adhered to the metering disk and moving along the seed path and guiding the seed into the single endless member, as shown in Figure 26.



FIGURE 26

Additionally, for example, the SpeedTube product is a seed delivery system whereby the single endless member moves the seed to the lower opening, as shown in Figure 27.

Control It

The belt matches the speed of the planter and carries the seed to the bottom of the trench. SpeedTube doesn't rely on gravity to get the seed in the right place. It controls the seed from meter to furrow.

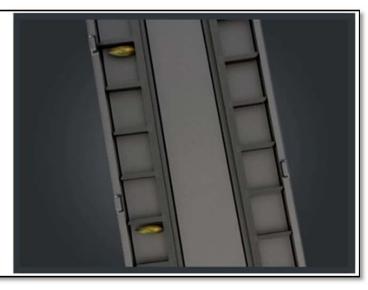


FIGURE 27

- 107. On information and belief, Defendant has been, and is still, knowingly and intentionally directly infringing, literally and/or under the doctrine of equivalents, one or more claims of the '663 Patent, including at least claim 1, by making, using, selling, offering to sell and/or importing the Accused Infringing Products in or into the United States, without authority. Thus, Defendant is liable for its infringement of the '663 Patent in violation of 35 U.S.C. § 271(a).
- 108. On information and belief, the Downstream Parties have been, and are still, infringing, literally and/or under the doctrine of equivalents, one or more claims of the '663 Patent, including at least claim 1, by making, using, selling, offering to sell and/or importing the Accused Infringing Products in or into the United States, without authority. Thus, the Downstream Parties are liable for their infringement of the '663 Patent in violation of 35 U.S.C. § 271(a).
- 109. On information and belief, Defendant did possess, and still possesses, knowledge and awareness that the Downstream Parties are infringing the '663 Patent as set forth in this Complaint.

- 110. On information and belief, Defendant has been, and is still, knowingly and intentionally inducing infringement, literally and/or under the doctrine of equivalents, of one or more claims of the '663 Patent, including at least claim 1, by actively encouraging the Downstream Parties to make, use, offer for sale, sell and/or import the Accused Infringing Products in or into the United States, without authority. For example, on information and belief, Defendant has actively and knowingly encouraged and facilitated, and continues to actively and knowingly encourage and facilitate, the Downstream Parties to directly infringe the '663 Patent by marketing and selling the Accused Infringing Products and instructing the Downstream Parties to combine the vSet Products with the SpeedTube product and make, use, sell, offer to sell, and/or import those products together. Thus, Defendant is liable as an active inducer of infringement in violation of 35 U.S.C. § 271(b).
- 111. On information and belief, Defendant has been, and is still, knowingly and intentionally contributorily infringing, literally and/or under the doctrine of equivalents, one or more claims of the '663 Patent, including at least claim 1, by making, using, selling, offering to sell and/or importing the Accused Infringing Products and/or one or more components of the Accused Infringing Products in or into the United States, without authority. On information and belief, Defendant did possess, and still possesses, knowledge and awareness that the Accused Infringing Products are especially made or adapted for use in an infringement of the '663 Patent, that the Accused Infringing Products include a material component for use in practicing the '663 Patent, and that the Accused Infringing Products are not a staple article or commodity of commerce suitable for substantial non-infringing use. Thus, Defendant is liable for its infringement of the '663 Patent in violation of 35 U.S.C. § 271(c).

- 112. Deere has suffered damages as a result of the direct and indirect infringing activities of Defendant and will continue to suffer such damages as long as those infringing activities continue.
- 113. Pursuant to 35 U.S.C. § 284, Deere is entitled to damages adequate to compensate it for the infringement, but in no event less than a reasonable royalty.
- 114. On information and belief, as set forth above, Defendant has directly and indirectly infringed the '663 Patent willfully and deliberately. On August 11, 2017, Deere sent a letter to Defendant identifying the '663 Patent and explaining that Precision Planting's products infringe multiple claims of the '663 Patent. As such, Defendant has had knowledge of the '663 Patent since no later than on or about August 11, 2017, and knew or should have known that there was an objectively high likelihood that its actions constituted infringement of one or more claims of the '663 Patent.
- 115. As a result of Defendant's deliberate and willful infringement, Deere is entitled to enhanced damages under 35 U.S.C. § 284.
- 116. Defendant's direct and indirect infringement has caused, and will continue to cause, irreparable harm to Deere, unless and until such infringement is enjoined by this Court.
- 117. Remedies at law are inadequate to compensate for that injury, with the balance of hardships between Deere and Defendant, and the public interest, warranting an injunction.

COUNT II: INFRINGEMENT OF U.S. PATENT NO. 9,480,199

- 118. Deere re-alleges paragraphs 1 through 117, which are incorporated herein by reference.
- 119. The '199 patent, entitled "Seeding Machine with Seed Delivery System," and naming Elijah B. Garner, Daniel B. Thiemke, David J. Rylander, Nathan A. Mariman, and Michael E. Friestad as its inventors, was duly and legally issued on November 1, 2016. Since

that date, Deere has been and is still the owner and possessor of all rights pertaining to the '199 patent.

- 120. On information and belief, the '199 Patent is valid, enforceable, and currently in full force and effect.
 - 121. Exemplary independent claim 1 of the '199 Patent recites the following:
 - 1. A seeding machine comprising:
 - a seed meter which includes a metering member with a plurality of apertures in a circular array, the seed meter configured to move individual seeds sequentially along a first path to a release position;
 - a delivery system which moves the individual seeds in a second path from the release position to a discharge position adjacent a seed furrow formed in soil beneath the seeding machine; and
 - a blocking loading surface which blocks movement of the individual seeds along the first path and permits redirection and movement of the individual seeds along the second path as the individual seeds are moved to the discharge position.
- 122. On information and belief, the Accused Infringing Products infringe at least claim 1 of the '199 Patent.
- 123. On information and belief, to the extent the preamble of claim 1 of the '199 Patent is considered to be a limitation, the Accused Infringing Products comprise a seeding machine. For example, the Accused Infringing Products comprise a seeding machine, as shown in Figure 28.

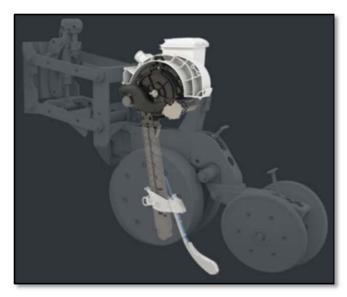


FIGURE 28

124. On information and belief, the Accused Infringing Products comprise a seed meter which includes a metering member with a plurality of apertures in a circular array, the seed meter configured to move individual seeds sequentially along a first path to a release position. For example, the vSet Products comprise seed meters which include a metering member with a plurality of apertures in a circular array, as shown in Figure 29.



FIGURE 29

Additionally, for example, the vSet Products comprise seed meters configured to move individual seeds sequentially along a first path to a release position, as shown in Figures 30A and 30B.





FIGURE 30A

FIGURE 30B

125. On information and belief, the Accused Infringing Products comprise a delivery system which moves the individual seeds in a second path from the release position to a discharge position adjacent a seed furrow formed in soil beneath the seeding machine. For example, the SpeedTube product comprises a delivery system which moves the individual seeds in a second path from the release position to a discharge position adjacent a seed furrow formed in soil beneath the seeding machine, as shown in Figure 31.

Control It

The belt matches the speed of the planter and carries the seed to the bottom of the trench.

SpeedTube doesn't rely on gravity to get the seed in the right place. It controls the seed from meter to furrow.

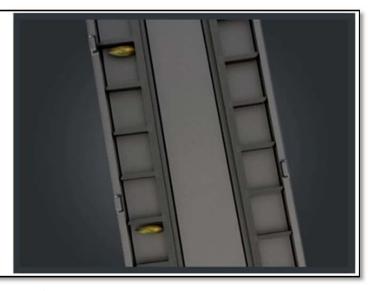


FIGURE 31

126. On information and belief, the Accused Infringing Products comprise a blocking loading surface which blocks movement of the individual seeds along the first path and permits redirection and movement of the individual seeds along the second path as the individual seeds are moved to the discharge position. For example, the SpeedTube product comprises a blocking loading surface which blocks movement of the individual seeds along the first path and permits redirection and movement of the individual seeds along the second path as the individual seeds are moved to the discharge position, as shown in Figure 32.

Grab It

Feeder wheels at the top grab the seed from the disk, placing it onto the belt, and safely delivering it to the bottom of the trench.



FIGURE 32

- 127. On information and belief, Defendant has been, and is still, knowingly and intentionally directly infringing, literally and/or under the doctrine of equivalents, one or more claims of the '199 Patent, including at least claim 1, by making, using, selling, offering to sell and/or importing the Accused Infringing Products in or into the United States, without authority. Thus, Defendant is liable for its infringement of the '199 Patent in violation of 35 U.S.C. § 271(a).
- 128. On information and belief, the Downstream Parties have been, and are still, infringing, literally and/or under the doctrine of equivalents, one or more claims of the '199 Patent, including at least claim 1, by making, using, selling, offering to sell and/or importing the Accused Infringing Products in or into the United States, without authority. Thus, the Downstream Parties are liable for their infringement of the '199 Patent in violation of 35 U.S.C. § 271(a).
- 129. On information and belief, Defendant did possess, and still possesses, knowledge and awareness that the Downstream Parties are infringing the '199 Patent as set forth in this Complaint.
- 130. On information and belief, Defendant has been, and is still, knowingly and intentionally inducing infringement, literally and/or under the doctrine of equivalents, of one or more claims of the '199 Patent, including at least claim 1, by actively encouraging the Downstream Parties to make, use, offer for sale, sell and/or import the Accused Infringing Products in or into the United States, without authority. For example, on information and belief, Defendant has actively and knowingly encouraged and facilitated, and continues to actively and knowingly encourage and facilitate, the Downstream Parties to directly infringe the '199 Patent

by marketing and selling the Accused Infringing Products and instructing the Downstream Parties to combine the vSet Products with the SpeedTube product and make, use, sell, offer to sell, and/or import those products together. Thus, Defendant is liable as an active inducer of infringement in violation of 35 U.S.C. § 271(b).

- 131. On information and belief, Defendant has been, and is still, knowingly and intentionally contributorily infringing, literally and/or under the doctrine of equivalents, one or more claims of the '199 Patent, including at least claim 1, by making, using, selling, offering to sell and/or importing the Accused Infringing Products and/or one or more components of the Accused Infringing Products in or into the United States, without authority. On information and belief, Defendant did possess, and still possesses, knowledge and awareness that the Accused Infringing Products are especially made or adapted for use in an infringement of the '199 Patent, that the Accused Infringing Products include a material component for use in practicing the '199 Patent, and that the Accused Infringing Products are not a staple article or commodity of commerce suitable for substantial non-infringing use. Thus, Defendant is liable for its infringement of the '199 Patent in violation of 35 U.S.C. § 271(c).
- 132. Deere has suffered damages as a result of the direct and indirect infringing activities of Defendant and will continue to suffer such damages as long as those infringing activities continue.
- 133. Pursuant to 35 U.S.C. § 284, Deere is entitled to damages adequate to compensate it for the infringement, but in no event less than a reasonable royalty.
- 134. On information and belief, as set forth above, Defendant has directly and indirectly infringed the '199 Patent willfully and deliberately. On August 11, 2017, Deere sent a letter to Defendant identifying the '199 Patent and explaining that Precision Planting's products

infringe multiple claims of the '199 Patent. As such, Defendant has had knowledge of the '199 Patent since no later than on or about August 11, 2017, and knew or should have known that there was an objectively high likelihood that its actions constituted infringement of one or more claims of the '199 Patent.

- 135. As a result of Defendant's deliberate and willful infringement, Deere is entitled to enhanced damages under 35 U.S.C. § 284.
- 136. Defendant's direct and indirect infringement has caused and will continue to cause irreparable harm to Deere, unless and until such infringement is enjoined by this Court.
- 137. Remedies at law are inadequate to compensate for that injury, with the balance of hardships between Deere and Defendant, and the public interest, warranting an injunction.

COUNT III: INFRINGEMENT OF U.S. PATENT NO. 9,807,922

- 138. Deere re-alleges paragraphs 1 through 137, which are incorporated herein by reference.
- 139. The '922 Patent, entitled "Seeding Machine with Seed Delivery System," and naming Elijah B. Garner, Daniel B. Thiemke, David J. Rylander, Nathan A. Mariman, and Michael E. Friestad as its inventors, was duly and legally issued on November 7, 2017. Since that date, Deere has been and is still the owner and possessor of all rights pertaining to the '922 Patent.
- 140. On information and belief, the '922 Patent is valid, enforceable, and currently in full force and effect.
 - 141. Exemplary independent claim 1 of the '922 Patent recites the following:
 - 1. A seeding machine for a row unit having a seed meter with a plurality of apertures through which an air pressure differential is applied to retain seed thereon, the seed meter movable to convey seed from a seed reservoir, the seeding machine comprising: a seed delivery apparatus including

an elongated housing having a first opening through which seed is received into the seed delivery apparatus, having a second opening through which seed exits the seed delivery apparatus, and defining an interior chamber along which seed is conveyed from the first opening to the second opening;

- a first pulley,
- a second pulley,
- an endless member driven by the first pulley and/or the second pulley, the endless member movable within the interior chamber of the elongated housing to receive seed from the first opening and convey seed to the second opening; and
- a loading surface stationary relative to the elongated housing and positioned to contact and guide seed toward the endless member.
- 142. On information and belief, the Accused Infringing Products infringe at least claim 1 of the '922 Patent.
- 143. On information and belief, to the extent the preamble of claim 1 of the '922 Patent is considered to be a limitation, the Accused Infringing Products comprise a seeding machine for a row unit having a seed meter with a plurality of apertures through which an air pressure differential is applied to retain seed thereon, the seed meter movable to convey seed from a seed reservoir. For example, the Accused Infringing Products comprise a seeding machine for a row unit, as shown in Figure 33.

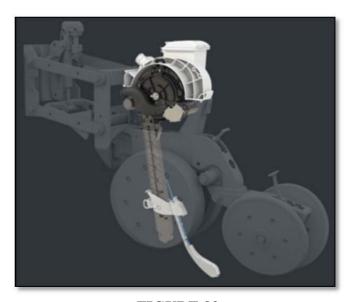


FIGURE 33

Additionally, for example, Accused Infringing Products comprise the vSet Products, which comprise a seed meter with a plurality of apertures through which an air pressure differential is applied to retain seed thereon, as shown in Figure 34.



FIGURE 34

Further, for example, the vSet Products comprise a seed meter moveable to convey seed from a seed reservoir, as shown in Figure 35A and 35B.



FIGURE 35A



FIGURE 35B

144. On information and belief, the Accused Infringing Products comprise a seed delivery apparatus. For example, the SpeedTube product is a seed delivery apparatus, as shown in Figure 36.



FIGURE 36

145. On information and belief, the Accused Infringing Products comprise a seed delivery apparatus including an elongated housing having a first opening through which seed is received into the seed delivery apparatus, having a second opening through which seed exits the seed delivery apparatus, and defining an interior chamber along which seed is conveyed from the first opening to the second opening. For example, the SpeedTube product is a seed delivery apparatus including an elongated housing, as shown in Figure 37.

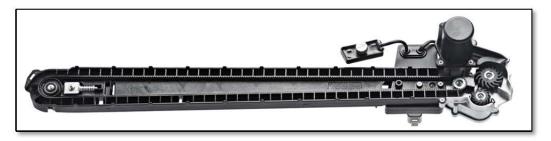


FIGURE 37

Additionally, for example, the SpeedTube product includes an elongated housing having a first opening through which seed is received into the seed delivery apparatus, as shown in Figure 38.

Grab It Feeder wheels at the top grab the seed from the disk, placing it onto the belt, and safely delivering it to the bottom of the trench.

FIGURE 38

Further, for example, the SpeedTube product includes an elongated housing having a second opening through which seed exists the seed delivery apparatus, as shown in Figure 39.



FIGURE 39

Moreover, for example, the SpeedTube product includes an elongated housing defining an interior chamber along which seed is conveyed from the first opening to the second opening, as shown in Figure 40.

Control It

The belt matches the speed of the planter and carries the seed to the bottom of the trench.

SpeedTube doesn't rely on gravity to get the seed in the right place. It controls the seed from meter to furrow.

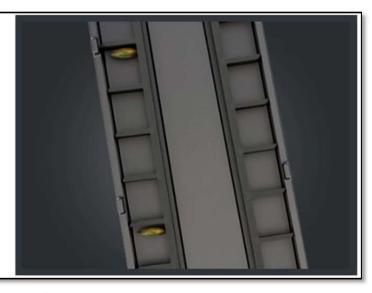


FIGURE 40

146. On information and belief, the Accused Infringing Products comprise a seed delivery apparatus including a first pulley. For example, the SpeedTube is a seed delivery apparatus including a first pulley, as shown in Figure 41.

Grab It

Feeder wheels at the top grab the seed from the disk, placing it onto the belt, and safely delivering it to the bottom of the trench.



FIGURE 41

147. On information and belief, the Accused Infringing Products comprise a seed delivery apparatus including a second pulley. For example, the SpeedTube is a seed delivery apparatus including a second pulley, as shown in Figure 42.

Release It

The belt spins at a rate that increases and decreases with planter speed, so you get optimal seed placement. Planting is consistent, regardless of planter speed. There is no bounce or roll in the trench. Spacing accuracy and yield are preserved.



FIGURE 42

148. On information and belief, the Accused Infringing Products comprise a seed delivery apparatus including an endless member driven by the first pulley and/or the second pulley, the endless member movable within the interior chamber of the elongated housing to receive seed from the first opening and convey seed to the second opening. For example, the SpeedTube is a seed delivery apparatus including an endless member driven by the first pulley and/or the second pulley, as shown in Figure 43.

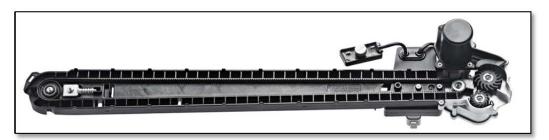


FIGURE 43

Additionally, for example, the endless member is moveable within the interior chamber of the elongated housing to receive seed from the first opening and convey seed to the second opening, as shown in Figure 44.



Feeder wheels at the top grab the seed from the disk, placing it onto the belt, and safely delivering it to the bottom of the trench.



FIGURE 44

149. On information and belief, the Accused Infringing Products comprise a seed delivery apparatus including a loading surface stationary relative to the elongated housing and positioned to contact and guide seed toward the endless member. For example, when equipped with a soybean deflector, the SpeedTube product is a seed delivery apparatus including a loading surface stationary relative to the elongated housing and positioned to contact and guide seed toward the endless member, as shown in Figure 45.

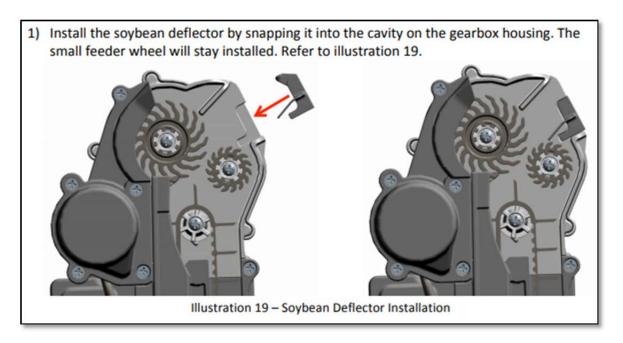


FIGURE 45

- 150. On information and belief, Defendant has been, and is still, knowingly and intentionally directly infringing, literally and/or under the doctrine of equivalents, one or more claims of the '922 Patent, including at least claim 1, by making, using, selling, offering to sell and/or importing the Accused Infringing Products in or into the United States, without authority. Thus, Defendant is liable for its infringement of the '922 Patent in violation of 35 U.S.C. § 271(a).
- 151. On information and belief, the Downstream Parties have been, and are still, infringing, literally and/or under the doctrine of equivalents, one or more claims of the '922 Patent, including at least claim 1, by making, using, selling, offering to sell and/or importing the Accused Infringing Products in or into the United States, without authority. Thus, the Downstream Parties are liable for their infringement of the '922 Patent in violation of 35 U.S.C. § 271(a).

- 152. On information and belief, Defendant did possess, and still possesses, knowledge and awareness that the Downstream Parties are infringing the '922 Patent as set forth in this Complaint.
- 153. On information and belief, Defendant has been, and is still, knowingly and intentionally inducing infringement, literally and/or under the doctrine of equivalents, of one or more claims of the '922 Patent, including at least claim 1, by actively encouraging the Downstream Parties to make, use, offer for sale, sell and/or import the Accused Infringing Products in or into the United States, without authority. For example, on information and belief, Defendant has actively and knowingly encouraged and facilitated, and continues to actively and knowingly encourage and facilitate, the Downstream Parties to directly infringe the '922 Patent by marketing and selling the Accused Infringing Products and instructing the Downstream Parties to combine the vSet Products with the SpeedTube product and make, use, sell, offer to sell, and/or import those products together. Thus, Defendant is liable as an active inducer of infringement in violation of 35 U.S.C. § 271(b).
- 154. On information and belief, Defendant has been, and is still, knowingly and intentionally contributorily infringing, literally and/or under the doctrine of equivalents, one or more claims of the '922 Patent, including at least claim 1, by making, using, selling, offering to sell and/or importing the Accused Infringing Products and/or one or more components of the Accused Infringing Products in or into the United States, without authority. On information and belief, Defendant did possess, and still possesses, knowledge and awareness that the Accused Infringing Products are especially made or adapted for use in an infringement of the '922 Patent, that the Accused Infringing Products include a material component for use in practicing the '922 Patent, and that the Accused Infringing Products are not a staple article or commodity of

commerce suitable for substantial non-infringing use. Thus, Defendant is liable for its infringement of the '922 Patent in violation of 35 U.S.C. § 271(c).

- 155. Deere has suffered damages as a result of the direct and indirect infringing activities of Defendant and will continue to suffer such damages as long as those infringing activities continue.
- 156. Pursuant to 35 U.S.C. § 284, Deere is entitled to damages adequate to compensate it for the infringement, but in no event less than a reasonable royalty.
- 157. Defendant's direct and indirect infringement has caused and will continue to cause irreparable harm to Deere, unless and until such infringement is enjoined by this Court.
- 158. Remedies at law are inadequate to compensate for that injury, with the balance of hardships between Deere and Defendant, and the public interest, warranting an injunction.

COUNT IV: INFRINGEMENT OF U.S. PATENT NO. 9,820,429

- 159. Deere re-alleges paragraphs 1 through 158, which are incorporated herein by reference.
- 160. The '429 Patent, entitled "Seeding Machine with Seed Delivery System," and naming Elijah B. Garner, Daniel B. Thiemke, David J. Rylander, Nathan A. Mariman, and Michael E. Friestad as its inventors, was duly and legally issued on November 21, 2017. Since that date, Deere has been and is still the owner and possessor of all rights pertaining to the '429 Patent.
- 161. On information and belief, the '429 Patent is valid, enforceable, and currently in full force and effect.
 - 162. Exemplary independent claim 1 of the '429 Patent recites the following:
 - 1. A row unit for a seeding machine having a seed metering member with a plurality of apertures through which an air pressure differential is applied to retain seed thereon, the seed metering member movable to convey seed from a seed reservoir, the

row unit comprising:

- a housing for the seed metering member; and
- a seed delivery apparatus comprising
 - a first pulley,
 - a second pulley, and
- an endless member configured to be driven by the first pulley and/or the second pulley, at least a portion of the endless member positioned within the housing wherein the endless member is positioned to move across at least one of the plurality of apertures.
- 163. On information and belief, the Accused Infringing Products infringe at least claim 1 of the '429 Patent.
- 164. On information and belief, to the extent the preamble of claim 1 of the '429 Patent is considered to be a limitation, the Accused Infringing Products comprise a row unit for a seeding machine having a seed metering member with a plurality of apertures through which an air pressure differential is applied to retain seed thereon, the seed metering member movable to convey seed from a seed reservoir. For example, the Accused Infringing Products comprise a row unit for a seeding machine, as shown in Figure 46.

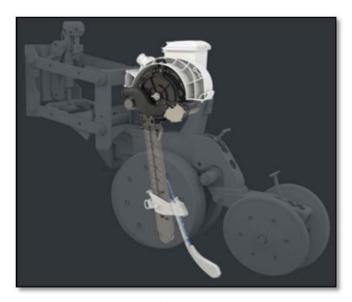


FIGURE 46

Additionally, the Accused Infringing Products comprise the vSet Products, which comprise a seed metering member, as shown in Figure 47.

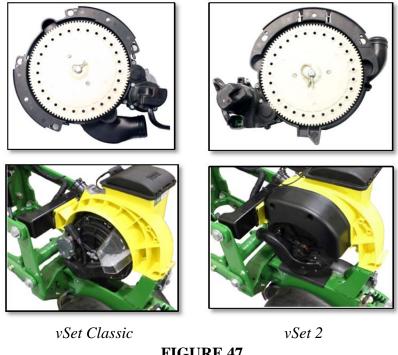


FIGURE 47

Further, for example, the vSet Products comprise a seed metering member that has a plurality of apertures through which an air pressure differential is applied to retain seed thereon, as shown in Figure 48.



FIGURE 48

Moreover, for example, the vSet Products comprise a seed metering member that is moveable to convey seed from a seed reservoir, as shown in Figure 49A and 49B.





FIGURE 49A

FIGURE 49B

165. On information and belief, the Accused Infringing Products comprise a housing for the seed metering member. For example, the vSet Products comprise a housing for the seed metering member, as shown in Figure 50.



FIGURE 50

166. On information and belief, the Accused Infringing Products comprise a seed delivery apparatus. For example, the SpeedTube product is a seed delivery apparatus, as shown in Figure 51.

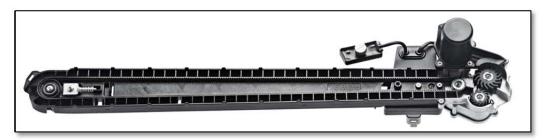


FIGURE 51

167. On information and belief, the Accused Infringing Products comprise a seed delivery apparatus comprising a first pulley. For example, the SpeedTube product is a seed delivery apparatus comprising a first pulley, as shown in Figure 52.

Grab It

Feeder wheels at the top grab the seed from the disk, placing it onto the belt, and safely delivering it to the bottom of the trench.



FIGURE 52

168. On information and belief, the Accused Infringing Products comprise a seed delivery apparatus comprising a second pulley. For example, the SpeedTube product is a seed delivery apparatus comprising a second pulley, as shown in Figure 53.

Release It

The belt spins at a rate that increases and decreases with planter speed, so you get optimal seed placement. Planting is consistent, regardless of planter speed. There is no bounce or roll in the trench. Spacing accuracy and yield are preserved.



FIGURE 53

169. On information and belief, the Accused Infringing Products comprise a seed delivery apparatus comprising an endless member configured to be driven by the first pulley and/or the second pulley, at least a portion of the endless member positioned within the housing

wherein the endless member is positioned to move across at least one of the plurality of apertures. For example, the SpeedTube product is a seed delivery apparatus comprising an endless member configured to be driven by the first pulley and/or the second pulley, as shown in Figure 54.



FIGURE 54

Additionally, for example, the SpeedTube product comprises an endless member, at least a portion of the endless member is positioned within the housing, as shown in Figure 55.

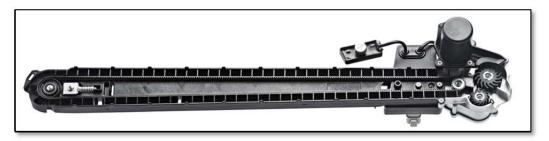


FIGURE 55

Further, for example, the SpeedTube Product comprises an endless member, the endless member being positioned to move across at least one of the plurality of apertures, as shown in Figure 56.



FIGURE 56

- 170. On information and belief, Defendant has been, and is still, knowingly and intentionally directly infringing, literally and/or under the doctrine of equivalents, one or more claims of the '429 Patent, including at least claim 1, by making, using, selling, offering to sell and/or importing the Accused Infringing Products in or into the United States, without authority. Thus, Defendant is liable for its infringement of the '429 Patent in violation of 35 U.S.C. § 271(a).
- 171. On information and belief, the Downstream Parties have been and are now infringing, literally and/or under the doctrine of equivalents, one or more claims of the '429 Patent, including at least claim 1, by making, using, selling, offering to sell and/or importing the Accused Infringing Products in or into the United States, without authority. Thus, the Downstream Parties are liable for their infringement of the '429 Patent in violation of 35 U.S.C. § 271(a).
- 172. On information and belief, Defendant did possess, and still possesses, knowledge and awareness that the Downstream Parties are infringing the '429 Patent as set forth in this Complaint.

- 173. On information and belief, Defendant has been, and is still, knowingly and intentionally inducing infringement, literally and/or under the doctrine of equivalents, of one or more claims of the '429 Patent, including at least claim 1, by actively encouraging the Downstream Parties to make, use, offer for sale, sell and/or import the Accused Infringing Products in or into the United States, without authority. For example, on information and belief, Defendant has actively and knowingly encouraged and facilitated, and continues to actively and knowingly encourage and facilitate, the Downstream Parties to directly infringe the '429 Patent by marketing and selling the Accused Infringing Products and instructing the Downstream Parties to combine the vSet Products with the SpeedTube product and make, use, sell, offer to sell, and/or import those products together. Thus, Defendant is liable as an active inducer of infringement in violation of 35 U.S.C. § 271(b).
- 174. On information and belief, Defendant has been, and is still, knowingly and intentionally contributorily infringing, literally and/or under the doctrine of equivalents, one or more claims of the '429 Patent, including at least claim 1, by making, using, selling, offering to sell and/or importing the Accused Infringing Products and/or one or more components of the Accused Infringing Products in or into the United States, without authority. On information and belief, Defendant did possess, and still possesses, knowledge and awareness that the Accused Infringing Products are especially made or adapted for use in an infringement of the '429 Patent, that the Accused Infringing Products include a material component for use in practicing the '429 Patent, and that the Accused Infringing Products are not a staple article or commodity of commerce suitable for substantial non-infringing use. Thus, Defendant is liable for its infringement of the '429 Patent in violation of 35 U.S.C. § 271(c).

- 175. Deere has suffered damages as a result of the direct and indirect infringing activities of Defendant and will continue to suffer such damages as long as those infringing activities continue.
- 176. Pursuant to 35 U.S.C. § 284, Deere is entitled to damages adequate to compensate it for the infringement, but in no event less than a reasonable royalty.
- 177. Defendant's direct and indirect infringement has caused and will continue to cause irreparable harm to Deere, unless and until such infringement is enjoined by this Court.
- 178. Remedies at law are inadequate to compensate for that injury, with the balance of hardships between Deere and Defendant, and the public interest, warranting an injunction.

COUNT V: INFRINGEMENT OF U.S. PATENT NO. 8,850,998

- 179. Deere re-alleges paragraphs 1 through 178, which are incorporated herein by reference.
- 180. The '998 Patent, entitled "Planting Unit for a Seeding Machine Having a Seed Meter and Seed Delivery System," and naming Elijah Garner, Michael E. Friestad, Nathan A. Mariman, and Lee E. Zumdome as its inventors, was duly and legally issued on October 7, 2014. Since that date, Deere has been and is still the owner and possessor of all rights pertaining to the '998 Patent.
- 181. On information and belief, the '998 Patent is valid, enforceable, and currently in full force and effect.
 - 182. Exemplary independent claim 2 of the '998 Patent recites the following:
 - 2. A planting unit for a seeding machine movable in a travel direction, comprising:
 - a seed meter having a metering member mounted for rotation about an axis, the metering member having a sidewall extending to an outer edge, the sidewall having inner and outer surfaces, a rim portion of the sidewall adjacent the outer edge having apertures extending through the sidewall, the metering member adapted to adhere seed to the apertures to sequentially move seed to a release position; and

a mechanical seed delivery system operable to take seed from the metering member at the release position and sweep seed in a direction substantially cross-wise to a direction of travel of the seed on the metering member as the metering member rotates and move seed to a discharge location adjacent a seed furrow formed in soil beneath the seeding machine.

- 183. On information and belief, the Accused Infringing Products infringe at least claim 2 of the '998 Patent.
- 184. On information and belief, to the extent the preamble of claim 2 of the '998 Patent is considered to be a limitation, the Accused Infringing Products comprise a planting unit for a seeding machine moveable in a travel direction. For example, the Accused Infringing Products comprise a planting unit for a seeding machine moveable in a travel direction, as shown in Figure 57.

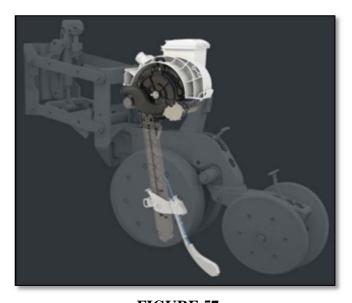


FIGURE 57

185. On information and belief, the Accused Infringing Products comprise a seed meter having a metering member mounted for rotation about an axis, the metering member having a sidewall extending to an outer edge, the sidewall having inner and outer surfaces, a rim portion of the sidewall adjacent the outer edge having apertures extending through the sidewall, the metering member adapted to adhere seed to the apertures to sequentially move seed to a

release position. For example, the vSet Products are a seed meter having a metering member mounted for rotation about an axis, as shown in Figure 58A and 58B.





FIGURE 58A

FIGURE 58B

Additionally, for example, the vSet Products comprise a metering member having a sidewall extending to an outer edge, the sidewall having inner and outer surfaces, as shown in Figure 59.

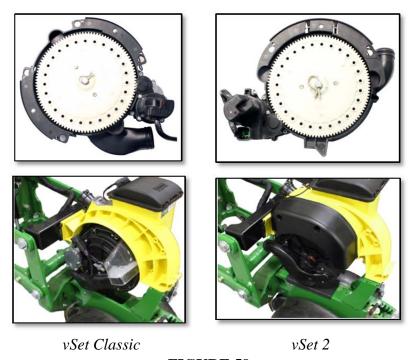


FIGURE 59

Further, for example, the vSet Products comprise a metering member having a rim portion of the sidewall adjacent the outer edge having apertures extending through the sidewall, as shown in Figure 60.



Moreover, for example, the vSet Products comprise a metering member adapted to adhere seed to the apertures to sequentially move seed to a release position, as shown in Figure 61A and 61B.





FIGURE 61A

FIGURE 61B

186. On information and belief, the Accused Infringing Products comprise a mechanical seed delivery system operable to take seed from the metering member at the release position and sweep seed in a direction substantially cross-wise to a direction of travel of the seed on the metering member as the metering member rotates and move seed to a discharge location adjacent a seed furrow formed in soil beneath the seeding machine. For example, the SpeedTube product comprises a mechanical seed delivery system, as shown in Figure 62.



FIGURE 62

187. Additionally, for example, the SpeedTube product is operable to take seed from the metering member at the release position and sweep seed in a direction substantially crosswise to a direction of travel of the seed on the metering member as the metering member rotates, as shown in Figure 63.

Grab It

Feeder wheels at the top grab the seed from the disk, placing it onto the belt, and safely delivering it to the bottom of the trench.



FIGURE 63

188. Further, for example, the SpeedTube product is operable to move seed to a discharge location adjacent a seed furrow formed in soil beneath the seeding machine, as shown in Figure 64.

Control It

The belt matches the speed of the planter and carries the seed to the bottom of the trench. SpeedTube doesn't rely on gravity to get the seed in the right place. It controls the seed from meter to furrow.

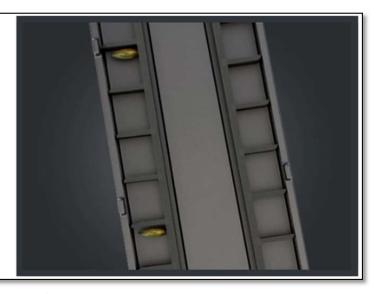


FIGURE 64

189. On information and belief, Defendant has been, and is still, knowingly and intentionally directly infringing, literally and/or under the doctrine of equivalents, one or more claims of the '998 Patent, including at least claim 2, by making, using, selling, offering to sell

and/or importing the Accused Infringing Products in or into the United States, without authority. Thus, Defendant is liable for its infringement of the '998 Patent in violation of 35 U.S.C. § 271(a).

- 190. On information and belief, the Downstream Parties have been and are now infringing, literally and/or under the doctrine of equivalents, one or more claims of the '998 Patent, including at least claim 2, by making, using, selling, offering to sell and/or importing the Accused Infringing Products in or into the United States, without authority. Thus, the Downstream Parties are liable for their infringement of the '998 Patent in violation of 35 U.S.C. § 271(a).
- 191. On information and belief, Defendant did possess, and still possesses, knowledge and awareness that the Downstream Parties are infringing the '998 Patent as set forth in this Complaint.
- 192. On information and belief, Defendant has been, and is still, knowingly and intentionally inducing infringement, literally and/or under the doctrine of equivalents, of one or more claims of the '998 Patent, including at least claim 2, by actively encouraging the Downstream Parties to make, use, offer for sale, sell and/or import the Accused Infringing Products in or into the United States, without authority. For example, on information and belief, Defendant has actively and knowingly encouraged and facilitated, and continues to actively and knowingly encourage and facilitate, the Downstream Parties to directly infringe the '998 Patent by marketing and selling the Accused Infringing Products and instructing the Downstream Parties to combine the vSet Products with the SpeedTube product and make, use, sell, offer to sell, and/or import those products together. Thus, Defendant is liable as an active inducer of infringement in violation of 35 U.S.C. § 271(b).

- 193. On information and belief, Defendant has been, and is still, knowingly and intentionally contributorily infringing, literally and/or under the doctrine of equivalents, one or more claims of the '998 Patent, including at least claim 2, by making, using, selling, offering to sell and/or importing the Accused Infringing Products and/or one or more components of the Accused Infringing Products in or into the United States, without authority. On information and belief, Defendant did possess, and still possesses, knowledge and awareness that the Accused Infringing Products are especially made or adapted for use in an infringement of the '998 Patent, that the Accused Infringing Products include a material component for use in practicing the '998 Patent, and that the Accused Infringing Products are not a staple article or commodity of commerce suitable for substantial non-infringing use. Thus, Defendant is liable for its infringement of the '998 Patent in violation of 35 U.S.C. § 271(c).
- 194. Deere has suffered damages as a result of the direct and indirect infringing activities of Defendant and will continue to suffer such damages as long as those infringing activities continue.
- 195. Pursuant to 35 U.S.C. § 284, Deere is entitled to damages adequate to compensate it for the infringement, but in no event less than a reasonable royalty.
- 196. On information and belief, as set forth above, Defendant has directly and indirectly infringed the '998 Patent willfully and deliberately. On August 11, 2017, Deere sent a letter to Defendant identifying the '998 Patent and explaining that Precision Planting's products infringe multiple claims of the '998 Patent. As such, Defendant has had knowledge of the '998 Patent since no later than on or about August 11, 2017, and knew or should have known that there was an objectively high likelihood that its actions constituted infringement of one or more claims of the '998 Patent.

- 197. As a result of Defendant's deliberate and willful infringement, Deere is entitled to enhanced damages under 35 U.S.C. § 284.
- 198. Defendant's direct and indirect infringement has caused and will continue to cause irreparable harm to Deere, unless and until such infringement is enjoined by this Court.
- 199. Remedies at law are inadequate to compensate for that injury, with the balance of hardships between Deere and Defendant, and the public interest, warranting an injunction.

COUNT VI: INFRINGEMENT OF U.S. PATENT NO. 9,699,955

- 200. Deere re-alleges paragraphs 1 through 199, which are incorporated herein by reference.
- 201. The '955 Patent, entitled "Seeding Machine with Seed Delivery System," and naming Elijah B. Garner, Daniel B. Thiemke, David J. Rylander, Nathan A. Mariman, and Michael E. Friestad as its inventors, was duly and legally issued on July 11, 2017. Since that date, Deere has been and is still the owner and possessor of all rights pertaining to the '955 Patent.
- 202. On information and belief, the '955 Patent is valid, enforceable, and currently in full force and effect.
 - 203. Exemplary independent claim 1 of the '955 Patent recites the following:
 - 1. A seeding machine for a row unit, the seeding machine comprising: a seed delivery apparatus including

an elongated housing having a first opening through which seed is received into the seed delivery apparatus, a second opening through which seed exits the seed delivery apparatus, and an elongated interior chamber along which seed is conveyed from the first opening to the second opening, and

an endless member positioned within the elongated housing, the endless member movable within the elongated interior chamber of the elongated housing to receive seed from the first opening and convey seed to the second opening;

a seed meter having a plurality of apertures through which an air pressure

differential is applied to retain seed thereon; and

- a nip proximate the first opening and through which seed from the seed meter passes, wherein seed is carried by the seed meter under the air pressure differential at least to the nip.
- 204. On information and belief, the Accused Infringing Products infringe at least claim 1 of the '955 Patent.
- 205. On information and belief, to the extent the preamble of claim 1 of the '955 Patent is considered to be a limitation, the Accused Infringing Products comprise a seeding machine for a row unit. For example, the Accused Infringing Products comprise a seeding machine for a row unit, as shown in Figure 65.

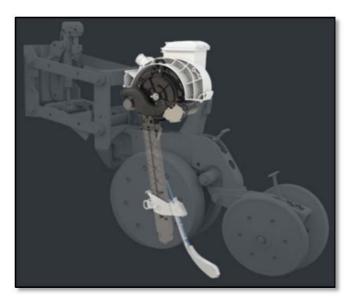


FIGURE 65

On information and belief, the Accused Infringing Products comprise a seed delivery apparatus. For example, the SpeedTube product comprises a seed delivery apparatus, as shown in Figure 66.

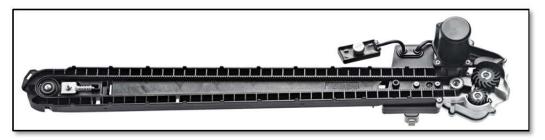


FIGURE 66

206. On information and belief, the Accused Infringing Products comprise a seed delivery apparatus including an elongated housing having a first opening through which seed is received into the seed delivery apparatus, a second opening through which seed exits the seed delivery apparatus, and an elongated interior chamber along which seed is conveyed from the first opening to the second opening. For example, the SpeedTube product comprises a seed delivery apparatus including an elongated housing having a first opening through which seed is received into the seed delivery apparatus, as shown in Figure 67.



FIGURE 67

Additionally, for example, the SpeedTube product comprises a seed delivery apparatus including an elongated housing having a second opening through which seed exits the seed delivery apparatus, as shown in Figure 68.

Release It

The belt spins at a rate that increases and decreases with planter speed, so you get optimal seed placement. Planting is consistent, regardless of planter speed. There is no bounce or roll in the trench. Spacing accuracy and yield are preserved.



FIGURE 68

Further, for example, the SpeedTube product comprises a seed delivery apparatus including an elongated housing having an elongated interior chamber along which seed is conveyed from the first opening to the second opening, as shown in Figure 69.

Control It

The belt matches the speed of the planter and carries the seed to the bottom of the trench. SpeedTube doesn't rely on gravity to get the seed in the right place. It controls the seed from meter to furrow.

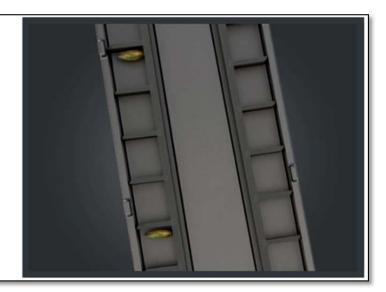


FIGURE 69

207. On information and belief, the Accused Infringing Products comprise a seed delivery apparatus including an endless member positioned within the elongated housing, the endless member movable within the elongated interior chamber of the elongated housing to

receive seed from the first opening and convey seed to the second opening. For example, the SpeedTube product comprises a seed delivery apparatus including an endless member positioned within the elongated housing, as shown in Figure 70.

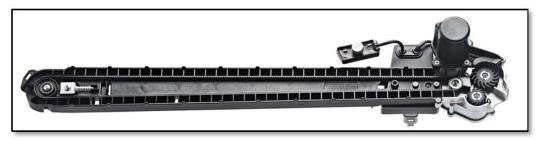


FIGURE 70

Additionally, for example, the SpeedTube product comprises a seed delivery apparatus including an endless member moveable within the elongated interior chamber of the elongated housing to receive seed from the first opening and convey seed to the second opening, as shown in Figure 71.



FIGURE 71

208. On information and belief, the Accused Infringing Products comprise a seed meter having a plurality of apertures through which an air pressure differential is applied to retain seed thereon. For example, the vSet Products comprise a seed meter having a plurality of

apertures through which an air pressure differential is applied to retain seed thereon, as shown in Figure 72A and 72B.





FIGURE 72A

FIGURE 72B

209. On information and belief, the Accused Infringing Products comprise a nip proximate the first opening and through which seed from the seed meter passes, wherein seed is carried by the seed meter under the air pressure differential at least to the nip. For example, the Accused Infringing Products comprise a nip proximate the first opening through which seed from the seed meter passes, as shown in Figure 73.



FIGURE 73

Additionally, for example, in the Accused Infringing Products, seed is carried by the seed meter under the air pressure differential at least to the nip, as shown in Figure 74.



FIGURE 74

210. On information and belief, Defendant has been, and is still, knowingly and intentionally directly infringing, literally and/or under the doctrine of equivalents, one or more claims of the '955 Patent, including at least claim 1, by making, using, selling, offering to sell and/or importing the Accused Infringing Products in or into the United States, without authority.

Thus, Defendant is liable for its infringement of the '955 Patent in violation of 35 U.S.C. § 271(a).

- 211. On information and belief, the Downstream Parties have been and are now infringing, literally and/or under the doctrine of equivalents, one or more claims of the '955 Patent, including at least claim 1, by making, using, selling, offering to sell and/or importing the Accused Infringing Products in or into the United States, without authority. Thus, the Downstream Parties are liable for their infringement of the '955 Patent in violation of 35 U.S.C. § 271(a).
- 212. On information and belief, Defendant did possess, and still possesses, knowledge and awareness that the Downstream Parties are infringing the '955 Patent as set forth in this Complaint.
- 213. On information and belief, Defendant has been, and is still, knowingly and intentionally inducing infringement, literally and/or under the doctrine of equivalents, of one or more claims of the '955 Patent, including at least claim 1, by actively encouraging the Downstream Parties to make, use, offer for sale, sell and/or import the Accused Infringing Products in or into the United States, without authority. For example, on information and belief, Defendant has actively and knowingly encouraged and facilitated, and continues to actively and knowingly encourage and facilitate, the Downstream Parties to directly infringe the '955 Patent by marketing and selling the Accused Infringing Products and instructing the Downstream Parties to combine the vSet Products with the SpeedTube product and make, use, sell, offer to sell, and/or import those products together. Thus, Defendant is liable as an active inducer of infringement in violation of 35 U.S.C. § 271(b).

- 214. On information and belief, Defendant has been, and is still, knowingly and intentionally contributorily infringing, literally and/or under the doctrine of equivalents, one or more claims of the '955 Patent, including at least claim 1, by making, using, selling, offering to sell and/or importing the Accused Infringing Products and/or one or more components of the Accused Infringing Products in or into the United States, without authority. On information and belief, Defendant did possess, and still possesses, knowledge and awareness that the Accused Infringing Products are especially made or adapted for use in an infringement of the '955 Patent, that the Accused Infringing Products include a material component for use in practicing the '955 Patent, and that the Accused Infringing Products are not a staple article or commodity of commerce suitable for substantial non-infringing use. Thus, Defendant is liable for its infringement of the '955 Patent in violation of 35 U.S.C. § 271(c).
- 215. Deere has suffered damages as a result of the direct and indirect infringing activities of Defendant and will continue to suffer such damages as long as those infringing activities continue.
- 216. Pursuant to 35 U.S.C. § 284, Deere is entitled to damages adequate to compensate it for the infringement, but in no event less than a reasonable royalty.
- 217. On information and belief, as set forth above, Defendant has directly and indirectly infringed the '955 Patent willfully and deliberately. On August 11, 2017, Deere sent a letter to Defendant identifying the '955 Patent and explaining that Precision Planting's products infringe multiple claims of the '955 Patent. As such, Defendant has had knowledge of the '955 Patent since no later than on or about August 11, 2017, and knew or should have known that there was an objectively high likelihood that its actions constituted infringement of one or more claims of the '955 Patent.

- 218. As a result of Defendant's deliberate and willful infringement, Deere is entitled to enhanced damages under 35 U.S.C. § 284.
- 219. Defendant's direct and indirect infringement has caused and will continue to cause irreparable harm to Deere, unless and until such infringement is enjoined by this Court.
- 220. Remedies at law are inadequate to compensate for that injury, with the balance of hardships between Deere and Defendant, and the public interest, warranting an injunction.

COUNT VII: INFRINGEMENT OF U.S. PATENT NO. 9,807,924

- 221. Deere re-alleges paragraphs 1 through 220, which are incorporated herein by reference.
- 222. The '924 Patent, entitled "Seeding Machine with Seed Delivery System," and naming Elijah B. Garner, Daniel B. Thiemke, David J. Rylander, Nathan A. Mariman, and Michael E. Friestad as its inventors, was duly and legally issued on November 7, 2017. Since that date, Deere has been and is still the owner and possessor of all rights pertaining to the '924 Patent.
- 223. On information and belief, the '924 Patent is valid, enforceable, and currently in full force and effect.
 - 224. Exemplary independent claim 1 of the '924 Patent recites the following:
 - 1. A seed delivery apparatus comprising:

an elongated housing having a first opening through which seed is received into the seed delivery apparatus, a second opening through which seed exits the seed delivery apparatus, and an elongated interior chamber along which seed is conveyed from the first opening to the second opening; and

an endless member positioned within the elongated housing, the endless member movable within the elongated interior chamber of the elongated housing to receive seed from the first opening and convey seed to the second opening, the endless member shaped to maintain contact with a top of each seed conveyed by the endless member along the elongated interior chamber between the first and second openings of the elongated housing.

- 225. On information and belief, the Accused Infringing Products infringe at least claim 1 of the '924 Patent.
- 226. On information and belief, to the extent the preamble of claim 1 of the '924 Patent is considered to be a limitation, the Accused Infringing Products comprise a seed delivery apparatus. For example, the SpeedTube product comprise a seed delivery apparatus, as shown in Figure 75.

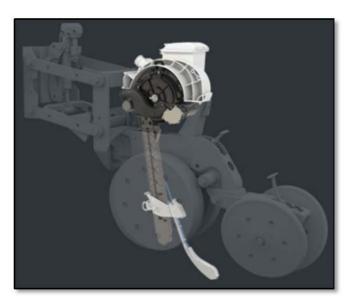


FIGURE 75

227. On information and belief, the Accused Infringing Products comprise an elongated housing having a first opening through which seed is received into the seed delivery apparatus, a second opening through which seed exits the seed delivery apparatus, and an elongated interior chamber along which seed is conveyed from the first opening to the second opening. For example, the SpeedTube product comprises an elongated housing having a first opening through which seed is received into the seed delivery apparatus, as shown in Figure 76.

Grab It

Feeder wheels at the top grab the seed from the disk, placing it onto the belt, and safely delivering it to the bottom of the trench.



FIGURE 76

Additionally, for example, the SpeedTube product comprises an elongated housing having a second opening through which seed exits the seed delivery apparatus, as shown in Figure 77.

Release It The belt spins at a rate that increases and

decreases with planter speed, so you get optimal seed placement. Planting is consistent, regardless of planter speed. There is no bounce or roll in the trench. Spacing accuracy and yield are preserved.



FIGURE 77

Further, for example, the SpeedTube product comprises an elongated interior chamber along which seed is conveyed from the first opening to the second opening, as shown in Figure 78.



The belt matches the speed of the planter and carries the seed to the bottom of the trench.

SpeedTube doesn't rely on gravity to get the seed in the right place. It controls the seed from meter to furrow.

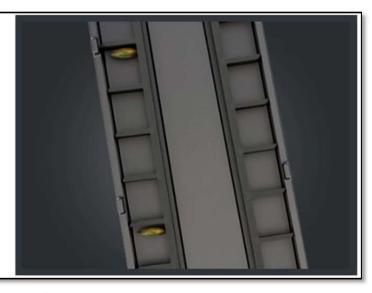


FIGURE 78

228. On information and belief, the Accused Infringing Products comprise an endless member positioned within the elongated housing, the endless member movable within the elongated interior chamber of the elongated housing to receive seed from the first opening and convey seed to the second opening, the endless member shaped to maintain contact with a top of each seed conveyed by the endless member along the elongated interior chamber between the first and second openings of the elongated housing. For example, the SpeedTube product comprises an endless member positioned within the elongated housing, as shown in Figure 79.

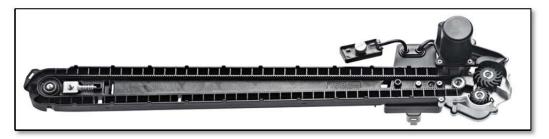


FIGURE 79

Additionally, for example, the SpeedTube product comprises an endless member moveable within the elongated interior chamber of the elongated housing to receive seed from the first opening and convey seed to the second opening, as shown in Figure 80.

Grab It

Feeder wheels at the top grab the seed from the disk, placing it onto the belt, and safely delivering it to the bottom of the trench.



FIGURE 80

Further, for example, the SpeedTube product comprises an endless member shaped to maintain contact with a top of each seed conveyed by the endless member along the elongated interior chamber between the first and second openings of the elongated housing, as shown in Figure 81.

Control It

The belt matches the speed of the planter and carries the seed to the bottom of the trench. SpeedTube doesn't rely on gravity to get the seed in the right place. It controls the seed from meter to furrow.



FIGURE 81

229. On information and belief, Defendant has been, and is still, knowingly and intentionally directly infringing, literally and/or under the doctrine of equivalents, one or more claims of the '924 Patent, including at least claim 1, by making, using, selling, offering to sell

and/or importing the Accused Infringing Products in or into the United States, without authority. Thus, Defendant is liable for its infringement of the '924 Patent in violation of 35 U.S.C. § 271(a).

- 230. On information and belief, the Downstream Parties have been and are now infringing, literally and/or under the doctrine of equivalents, one or more claims of the '924 Patent, including at least claim 1, by making, using, selling, offering to sell and/or importing the Accused Infringing Products in or into the United States, without authority. Thus, Defendant's customers are liable for their infringement of the '924 Patent in violation of 35 U.S.C. § 271(a).
- 231. On information and belief, Defendant did possess, and still possesses, knowledge and awareness that the Downstream Parties are infringing the '924 Patent as set forth in this Complaint.
- 232. On information and belief, Defendant has been, and is still, knowingly and intentionally inducing infringement, literally and/or under the doctrine of equivalents, of one or more claims of the '924 Patent, including at least claim 1, by actively encouraging the Downstream Parties to make, use, offer for sale, sell and/or import the Accused Infringing Products in or into the United States, without authority. For example, on information and belief, Defendant has actively and knowingly encouraged and facilitated, and continues to actively and knowingly encourage and facilitate, the Downstream Parties to directly infringe the '924 Patent by marketing and selling the Accused Infringing Products and instructing the Downstream Parties to combine the vSet Products with the SpeedTube product and make, use, sell, offer to sell, and/or import those products together. Thus, Defendant is liable as an active inducer of infringement in violation of 35 U.S.C. § 271(b).

- 233. On information and belief, Defendant has been, and is still, knowingly and intentionally contributorily infringing, literally and/or under the doctrine of equivalents, one or more claims of the '924 Patent, including at least claim 1, by making, using, selling, offering to sell and/or importing the Accused Infringing Products and/or one or more components of the Accused Infringing Products in or into the United States, without authority. On information and belief, Defendant did possess, and still possesses, knowledge and awareness that the Accused Infringing Products are especially made or adapted for use in an infringement of the '924 Patent, that the Accused Infringing Products include a material component for use in practicing the '924 Patent, and that the Accused Infringing Products are not a staple article or commodity of commerce suitable for substantial non-infringing use. Thus, Defendant is liable for its infringement of the '924 Patent in violation of 35 U.S.C. § 271(c).
- 234. Deere has suffered damages as a result of the direct and indirect infringing activities of Defendant and will continue to suffer such damages as long as those infringing activities continue.
- 235. Pursuant to 35 U.S.C. § 284, Deere is entitled to damages adequate to compensate it for the infringement, but in no event less than a reasonable royalty.
- 236. Defendant's direct and indirect infringement has caused and will continue to cause irreparable harm to Deere, unless and until such infringement is enjoined by this Court.
- 237. Remedies at law are inadequate to compensate for that injury, with the balance of hardships between Deere and Defendant, and the public interest, warranting an injunction.

COUNT VIII: INFRINGEMENT OF U.S. PATENT NO. 9,686,906

238. Deere re-alleges paragraphs 1 through 237, which are incorporated herein by reference.

- 239. The '906 Patent, entitled "Seed Machine with Seed Delivery System," and naming Elijah B. Garner, Daniel B. Thiemke, David J. Rylander, Nathan A. Mariman, and Michael E. Friestad as its inventors, was duly and legally issued on June 27, 2017. Since that date, Deere has been and is still the owner and possessor of all rights pertaining to the '906 Patent.
- 240. On information and belief, the '906 Patent is valid, enforceable, and currently in full force and effect.
 - 241. Exemplary independent claim 1 of the '906 Patent recites the following:
 - 1. A seed delivery apparatus comprising:

an elongated housing having a first opening through which seed is received into the seed delivery apparatus, a second opening through which seed exits the seed delivery apparatus, and an elongated interior chamber along which seed is conveyed from the first opening to the second opening; and

an endless member positioned within the elongated housing, the endless member positioned to receive seed through the first opening of the elongated housing, the endless member movable within the elongated interior chamber of the elongated housing to

convey seed away from the first opening at a first velocity,

accelerate seed toward the second opening, and

discharge seed through the second opening at second velocity greater than the first velocity.

- 242. On information and belief, the Accused Infringing Products infringe at least claim 1 of the '906 Patent.
- 243. On information and belief, to the extent the preamble of claim 1 of the '906 Patent is considered to be a limitation, the Accused Infringing Products comprise a seed delivery apparatus. For example, the Accused Infringing Products comprise a seed delivery apparatus, as shown in Figure 82.

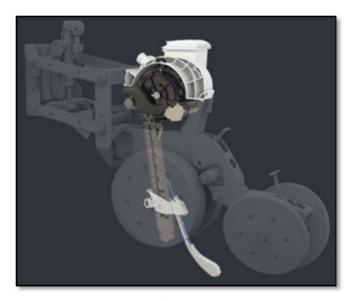


FIGURE 82

244. On information and belief, the Accused Infringing Products comprise an elongated housing having a first opening through which seed is received into the seed delivery apparatus, a second opening through which seed exits the seed delivery apparatus, and an elongated interior chamber along which seed is conveyed from the first opening to the second opening. For example, the SpeedTube product comprises an elongated housing having a first opening through which seed is received into the seed delivery apparatus, as shown in Figure 83.



FIGURE 83

Additionally, for example, the SpeedTube product comprises an elongated housing having a second opening through which seed exits the seed delivery apparatus, as shown in Figure 84.

Release It The belt spins at a rate that increases and decreases with planter speed, so you get optimal seed placement. Planting is consistent, regardless of planter speed. There is no bounce or roll in the trench. Spacing accuracy and yield are preserved.

FIGURE 84

Further, for example, the SpeedTube product comprises an elongated housing having an elongated interior chamber along which seed is conveyed from the first opening to the second opening, as shown in Figure 85.



FIGURE 85

245. On information and belief, the Accused Infringing Products comprise an endless member positioned within the elongated housing, the endless member positioned to receive seed through the first opening of the elongated housing, the endless member movable within the elongated interior chamber of the elongated housing to convey seed away from the first opening at a first velocity, accelerate seed toward the second opening, and discharge seed through the second opening at second velocity greater than the first velocity. For example, the SpeedTube product comprises an endless member positioned within the elongated housing, as shown in Figure 86.

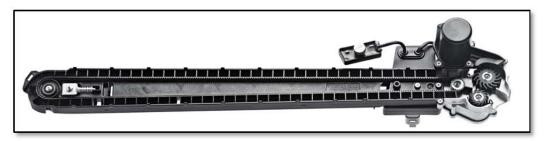


FIGURE 86

Additionally, for example, the SpeedTube product comprises an endless member positioned to receive seed through the first opening of the elongated housing, as shown in Figure 87.



FIGURE 87

Further, for example, the SpeedTube product comprises an endless member moveable within the elongated interior chamber of the elongated housing to convey seed away from the first opening at a first velocity, accelerate seed toward the second opening, and discharge seed through the second opening at a second velocity greater than the first velocity, as shown in Figure 88.



FIGURE 88

- 246. On information and belief, Defendant has been, and is still, knowingly and intentionally directly infringing, literally and/or under the doctrine of equivalents, one or more claims of the '906 Patent, including at least claim 1, by making, using, selling, offering to sell and/or importing the Accused Infringing Products in or into the United States, without authority. Thus, Defendant is liable for its infringement of the '906 Patent in violation of 35 U.S.C. § 271(a).
- 247. On information and belief, the Downstream Parties have been and are now infringing, literally and/or under the doctrine of equivalents, one or more claims of the '906 Patent, including at least claim 1, by making, using, selling, offering to sell and/or importing the Accused Infringing Products in or into the United States, without authority. Thus, the

Downstream Parties are liable for their infringement of the '906 Patent in violation of 35 U.S.C. § 271(a).

- 248. On information and belief, Defendant did possess, and still possesses, knowledge and awareness that the Downstream Parties are infringing the '906 Patent as set forth in this Complaint.
- 249. On information and belief, Defendant has been, and is still, knowingly and intentionally inducing infringement, literally and/or under the doctrine of equivalents, of one or more claims of the '906 Patent, including at least claim 1, by actively encouraging the Downstream Parties to make, use, offer for sale, sell and/or import the Accused Infringing Products in or into the United States, without authority. For example, on information and belief, Defendant has actively and knowingly encouraged and facilitated, and continues to actively and knowingly encourage and facilitate, the Downstream Parties to directly infringe the '906 Patent by marketing and selling the Accused Infringing Products and instructing the Downstream Parties to combine the vSet Products with the SpeedTube product and make, use, sell, offer to sell, and/or import those products together. Thus, Defendant is liable as an active inducer of infringement in violation of 35 U.S.C. § 271(b).
- 250. On information and belief, Defendant has been, and is still, knowingly and intentionally contributorily infringing, literally and/or under the doctrine of equivalents, one or more claims of the '906 Patent, including at least claim 1, by making, using, selling, offering to sell and/or importing the Accused Infringing Products and/or one or more components of the Accused Infringing Products in or into the United States, without authority. On information and belief, Defendant did possess, and still possesses, knowledge and awareness that the Accused Infringing Products are especially made or adapted for use in an infringement of the '906 Patent,

that the Accused Infringing Products include a material component for use in practicing the '906 Patent, and that the Accused Infringing Products are not a staple article or commodity of commerce suitable for substantial non-infringing use. Thus, Defendant is liable for its infringement of the '906 Patent in violation of 35 U.S.C. § 271(c).

- 251. Deere has suffered damages as a result of the direct and indirect infringing activities of Defendant and will continue to suffer such damages as long as those infringing activities continue.
- 252. Pursuant to 35 U.S.C. § 284, Deere is entitled to damages adequate to compensate it for the infringement, but in no event less than a reasonable royalty.
- 253. Defendant's direct and indirect infringement has caused and will continue to cause irreparable harm to Deere, unless and until such infringement is enjoined by this Court.
- 254. Remedies at law are inadequate to compensate for that injury, with the balance of hardships between Deere and Defendant, and the public interest, warranting an injunction.

COUNT IX: INFRINGEMENT OF U.S. PATENT NO. 8,671,856

- 255. Deere re-alleges paragraphs 1 through 254, which are incorporated herein by reference.
- 256. The '856 Patent, entitled "Planting Unit for a Seeding Machine Having Blocking Member to Control Hand-Off of Seed From a Seed Meter to a Seed Delivery System," and naming Elijah Garner, Michael E. Friestad, Nathan A. Mariman, and Lee E. Zumdome as its inventors, was duly and legally issued on March 18, 2014. Since that date, Deere has been and is still the owner and possessor of all rights pertaining to the '856 Patent.
- 257. On information and belief, the '856 Patent is valid, enforceable, and currently in full force and effect.
 - 258. Exemplary independent claim 1 of the '856 Patent recites the following:

- 1. A planting unit for a seeding machine comprising:
- a seed meter having a metering member that moves individual seeds sequentially along a first path to a release position at which the seed is moving in a first direction;
- a delivery system taking seed from the metering member at the release position and move seed from the seed meter to a discharge location adjacent a seed furrow formed in soil beneath the seeding machine, the delivery system, at the release position, moving seed in a second direction along a second path; and
- a blocking member located adjacent the first path immediately preceding the release position preventing movement of the seed in the second direction until the seed has passed the blocking member.
- 259. On information and belief, the Accused Infringing Products infringe at least claim 1 of the '856 Patent.
- 260. On information and belief, to the extent the preamble of claim 1 of the '856 Patent is considered to be a limitation, the Accused Infringing Products comprise a planting unit for a seeding machine. For example, the Accused Infringing Products comprise a planting unit for a seeding machine, as shown in Figure 89.

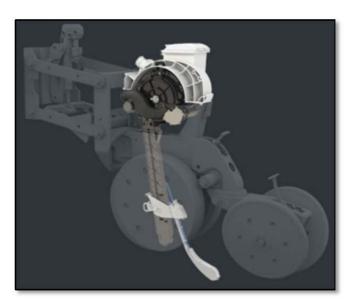


FIGURE 89

261. On information and belief, the Accused Infringing Products comprise a seed meter having a metering member that moves individual seeds sequentially along a first path to a

release position at which the seed is moving in a first direction. For example, the vSet Products comprise a seed meter having a metering member that moves individual seeds sequentially along a first path to a release position at which the seed is moving in a first direction, as shown in Figure 90.



FIGURE 90

262. On information and belief, the Accused Infringing Products comprise a delivery system taking seed from the metering member at the release position and move seed from the seed meter to a discharge location adjacent a seed furrow formed in soil beneath the seeding machine, the delivery system, at the release position, moving seed in a second direction along a second path. For example, the SpeedTube product comprises a delivery system taking seed from the metering member at the release position and moving seed from the seed meter to a discharge location adjacent a seed furrow formed in soil beneath the seeding machine, as shown in Figure 91.



FIGURE 91

Additionally, for example, the SpeedTube comprises a delivery system that, at the release position, moves seed in a second direction along a second path, as shown in Figure 92.



FIGURE 92

263. On information and belief, the Accused Infringing Products comprise a blocking member located adjacent the first path immediately preceding the release position preventing movement of the seed in the second direction until the seed has passed the blocking member. For example, the SpeedTube product comprises a blocking member located adjacent the first

path immediately preceding the release position preventing movement of the seed in the second direction until the seed has passed the blocking member, as shown in Figure 93.



FIGURE 93

- 264. On information and belief, Defendant has been, and is still, knowingly and intentionally directly infringing, literally and/or under the doctrine of equivalents, one or more claims of the '856 Patent, including at least claim 1, by making, using, selling, offering to sell and/or importing the Accused Infringing Products in or into the United States, without authority. Thus, Defendant is liable for its infringement of the '856 Patent in violation of 35 U.S.C. § 271(a).
- 265. On information and belief, the Downstream Parties have been and are now infringing, literally and/or under the doctrine of equivalents, one or more claims of the '856 Patent, including at least claim 1, by making, using, selling, offering to sell and/or importing the Accused Infringing Products in or into the United States, without authority. Thus, the Downstream Parties are liable for their infringement of the '856 Patent in violation of 35 U.S.C. § 271(a).

- 266. On information and belief, Defendant did possess, and still possesses, knowledge and awareness that the Downstream Parties are infringing the '906 Patent as set forth in this Complaint.
- 267. On information and belief, Defendant has been, and is still, knowingly and intentionally inducing infringement, literally and/or under the doctrine of equivalents, of one or more claims of the '856 Patent, including at least claim 1, by actively encouraging the Downstream Parties to make, use, offer for sale, sell and/or import the Accused Infringing Products in or into the United States, without authority. For example, on information and belief, Defendant has actively and knowingly encouraged and facilitated, and continues to actively and knowingly encourage and facilitate, the Downstream Parties to directly infringe the '856 Patent by marketing and selling the Accused Infringing Products and instructing the Downstream Parties to combine the vSet Products with the SpeedTube product and make, use, sell, offer to sell, and/or import those products together. Thus, Defendant is liable as an active inducer of infringement in violation of 35 U.S.C. § 271(b).
- 268. On information and belief, Defendant has been, and is still, knowingly and intentionally contributorily infringing, literally and/or under the doctrine of equivalents, one or more claims of the '856 Patent, including at least claim 1, by making, using, selling, offering to sell and/or importing the Accused Infringing Products and/or one or more components of the Accused Infringing Products in or into the United States, without authority. On information and belief, Defendant did possess, and still possesses, knowledge and awareness that the Accused Infringing Products are especially made or adapted for use in an infringement of the '856 Patent, that the Accused Infringing Products include a material component for use in practicing the '856 Patent, and that the Accused Infringing Products are not a staple article or commodity of

commerce suitable for substantial non-infringing use. Thus, Defendant is liable for its infringement of the '856 Patent in violation of 35 U.S.C. § 271(c).

- 269. Deere has suffered damages as a result of the direct and indirect infringing activities of Defendant and will continue to suffer such damages as long as those infringing activities continue.
- 270. Pursuant to 35 U.S.C. § 284, Deere is entitled to damages adequate to compensate it for the infringement, but in no event less than a reasonable royalty.
- 271. Defendant's direct and indirect infringement has caused and will continue to cause irreparable harm to Deere, unless and until such infringement is enjoined by this Court.
- 272. Remedies at law are inadequate to compensate for that injury, with the balance of hardships between Deere and Defendant, and the public interest, warranting an injunction.

COUNT X: INFRINGEMENT OF U.S. PATENT NO. 9,661,799

- 273. Deere re-alleges paragraphs 1 through 272, which are incorporated herein by reference.
- 274. The '799 Patent, entitled "Planting Unit Having a Seed Meter and an Endless Seed Delivery System," and naming Elijah B. Garner, Lee E. Zumdome, Nathan A. Mariman, and Michael E. Friestad as its inventors, was duly and legally issued on May 30, 2017. Since that date, Deere has been and is still the owner and possessor of all rights pertaining to the '799 Patent.
- 275. On information and belief, the '799 Patent is valid, enforceable, and currently in full force and effect.
 - 276. Exemplary independent claim 1 of the '799 Patent recites the following:
 - 1. A planting unit for a seeding machine comprising:
 - a seed meter having a metering member mounted for rotation, the metering member

having a sidewall extending to an outer edge, the sidewall having inner and outer surfaces, a rim portion of the sidewall adjacent the outer edge having apertures extending through the sidewall for adhering seed to the inner surface of the metering member to sequentially move individual seeds to a release position; and

a mechanical seed delivery system having a single endless member to take seed from the metering member at the release position and sweep seed in a direction substantially cross-wise to a direction of travel of the seed on the metering member as the metering member rotates and to carry seed to a discharge location adjacent a seed furrow formed in soil beneath the seeding machine.

- 277. On information and belief, the Accused Infringing Products infringe at least claim 1 of the '799 Patent when combined together.
- 278. On information and belief, to the extent the preamble of claim 1 of the '799 Patent is considered to be a limitation, the Accused Infringing Products comprise a planting unit for a seeding machine. For example, the Accused Infringing Products comprise a planting unit for a seeding machine, as shown in Figure 94.

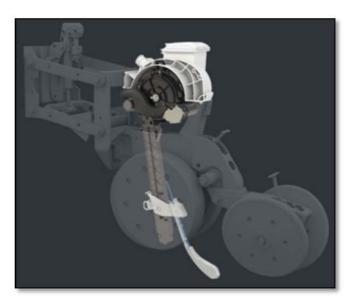


FIGURE 94

279. On information and belief, the Accused Infringing Products comprise a seed meter having a metering member mounted for rotation, the metering member having a sidewall extending to an outer edge, the sidewall having inner and outer surfaces, a rim portion of the

sidewall adjacent the outer edge having apertures extending through the sidewall for adhering seed to the inner surface of the metering member to sequentially move individual seeds to a release position. For example, the vSet Products comprise a seed meter having a metering member mounted for rotation, as shown in Figure 95A and 95B.





FIGURE 95A

FIGURE 95B

Additionally, for example, the vSet Products comprise a seed meter having a metering member having a sidewall extending to an outer edge, the sidewall having inner and outer surfaces, as shown in Figure 96.







FIGURE 96

Moreover, for example, the vSet Products comprise a rim portion of the sidewall adjacent the outer edge having apertures extending through the sidewall for adhering seed to the inner surface of the metering member to sequentially move individual seeds to a release position, as shown in Figure 97.



FIGURE 97

280. On information and belief, the Accused Infringing Products comprise a mechanical seed delivery system having a single endless member to take seed from the metering member at the release position and sweep seed in a direction substantially cross-wise to a direction of travel of the seed on the metering member as the metering member rotates and to carry seed to a discharge location adjacent a seed furrow formed in soil beneath the seeding machine. For example, the SpeedTube product comprises a mechanical seed delivery system

having a single endless member to take seed from the metering member at the release position, as shown in Figure 98.

Grab It

Feeder wheels at the top grab the seed from the disk, placing it onto the belt, and safely delivering it to the bottom of the trench.



FIGURE 98

Additionally, for example, the SpeedTube product comprises a mechanical seed delivery system having a single endless member to sweep seed in a direction substantially cross-wise to a direction of travel of the seed on the metering member as the metering member rotates, as shown in Figure 99.

Grab It

Feeder wheels at the top grab the seed from the disk, placing it onto the belt, and safely delivering it to the bottom of the trench.



FIGURE 99

Further, for example, the SpeedTube product comprises a mechanical seed delivery system having a single endless member to carry seed to a discharge location adjacent a seed furrow formed in soil beneath the seeding machine, as shown in Figure 100.



FIGURE 100

- 281. On information and belief, Defendant has been, and is still, knowingly and intentionally directly infringing, literally and/or under the doctrine of equivalents, one or more claims of the '799 Patent, including at least claim 1, by making, using, selling, offering to sell and/or importing the Accused Infringing Products in or into the United States, without authority. Thus, Defendant is liable for its infringement of the '799 Patent in violation of 35 U.S.C. § 271(a).
- 282. On information and belief, the Downstream Parties have been and are now infringing, literally and/or under the doctrine of equivalents, one or more claims of the '799 Patent, including at least claim 1, by making, using, selling, offering to sell and/or importing the Accused Infringing Products in or into the United States, without authority. Thus, the Downstream Parties are liable for their infringement of the '799 Patent in violation of 35 U.S.C. § 271(a).

- 283. On information and belief, Defendant did possess, and still possesses, knowledge and awareness that the Downstream Parties are infringing the '799 Patent as set forth in this Complaint.
- 284. On information and belief, Defendant has been, and is still, knowingly and intentionally inducing infringement, literally and/or under the doctrine of equivalents, of one or more claims of the '799 Patent, including at least claim 1, by actively encouraging the Downstream Parties to make, use, offer for sale, sell and/or import the Accused Infringing Products in or into the United States, without authority. For example, on information and belief, Defendant has actively and knowingly encouraged and facilitated, and continues to actively and knowingly encourage and facilitate, the Downstream Parties to directly infringe the '799 Patent by marketing and selling the Accused Infringing Products and instructing the Downstream Parties to combine the vSet Products with the SpeedTube product and make, use, sell, offer to sell, and/or import those products together. Thus, Defendant is liable as an active inducer of infringement in violation of 35 U.S.C. § 271(b).
- 285. On information and belief, Defendant has been, and is still, knowingly and intentionally contributorily infringing, literally and/or under the doctrine of equivalents, one or more claims of the '799 Patent, including at least claim 1, by making, using, selling, offering to sell and/or importing the Accused Infringing Products and/or one or more components of the Accused Infringing Products in or into the United States, without authority. On information and belief, Defendant did possess, and still possesses, knowledge and awareness that the Accused Infringing Products are especially made or adapted for use in an infringement of the '799 Patent, that the Accused Infringing Products include a material component for use in practicing the '799 Patent, and that the Accused Infringing Products are not a staple article or commodity of

commerce suitable for substantial non-infringing use. Thus, Defendant is liable for its infringement of the '799 Patent in violation of 35 U.S.C. § 271(c).

- 286. Deere has suffered damages as a result of the direct and indirect infringing activities of Defendant and will continue to suffer such damages as long as those infringing activities continue.
- 287. Pursuant to 35 U.S.C. § 284, Deere is entitled to damages adequate to compensate it for the infringement, but in no event less than a reasonable royalty.
- 288. Defendant's direct and indirect infringement has caused and will continue to cause irreparable harm to Deere, unless and until such infringement is enjoined by this Court.
- 289. Remedies at law are inadequate to compensate for that injury, with the balance of hardships between Deere and Defendant, and the public interest, warranting an injunction.

COUNT XI: INFRINGEMENT OF U.S. PATENT NO. 9,861,031

- 290. Deere re-alleges paragraphs 1 through 289, which are incorporated herein by reference.
- 291. The '031 Patent, entitled "Seeding Machine with Seed Delivery System," and naming Elijah B. Garner, Daniel B. Thiemke, David J. Rylander, Nathan A. Mariman, and Michael E. Friestad as its inventors, was duly and legally issued on January 18, 2018. Since that date, Deere has been and is still the owner and possessor of all rights pertaining to the '031 Patent.
- 292. On information and belief, '031 Patent is valid, enforceable, and currently in full force and effect.
 - 293. Exemplary independent claim 1 of the '031 Patent recites the following:
 - 1. A seeding machine for a row unit having a seed meter with a plurality of apertures through which an air pressure differential is applied to retain seed thereon, the seed

meter movable to convey seed from a seed reservoir, the seeding machine comprising: a seed delivery apparatus comprising

an elongated housing having a first opening through which seed is received, a second opening through which seed exits, and an elongated interior chamber along which seed is conveyed from the first opening to the second opening,

- a first pulley,
- a second pulley,
- an endless member driven by the first pulley and/or the second pulley, the endless member movable within the elongated interior chamber of the elongated housing to receive seed from the first opening and convey seed to the second opening; and
- a loading surface movable with respect to the endless member and positioned to contact and initially guide seed from the seed meter into the seed delivery apparatus.
- 294. On information and belief, the Accused Infringing Products infringe at least claim 1 of the '031 Patent when combined together.
- 295. On information and belief, to the extent the preamble of claim 1 of the '031 Patent is considered to be a limitation, the Accused Infringing Products comprise a seeding machine for a row unit having a seed meter with a plurality of apertures through which an air pressure differential is applied to retain seed thereon, the seed meter movable to convey seed from a seed reservoir. For example, the Accused Infringing Products comprise a seeding machine for a row unit, as shown in Figure 101.

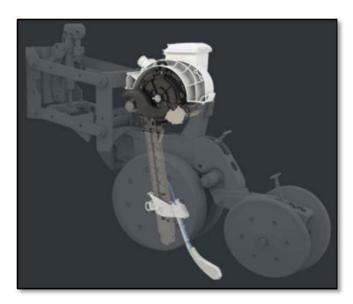


FIGURE 101

Additionally, for example, the Accused Infringing Products comprise the vSet Products, which a seed meter with a plurality of apertures through which an air pressure differential is applied to retain seed thereon, as shown in Figure 102.



FIGURE 102

Further, for example, the vSet Products comprise a seed meter moveable to convey seed from a seed reservoir, as shown in Figure 103A and Figure 103B.





FIGURE 103A

FIGURE 103B

296. On information and belief, the Accused Infringing Products comprise a seed delivery apparatus. For example, the SpeedTube product is a seed delivery apparatus, as shown in Figure 104.



FIGURE 104

297. On information and belief, the Accused Infringing Products comprise a seed delivery apparatus comprising an elongated housing having a first opening through which seed is received, a second opening through which seed exits, and an elongated interior chamber along which seed is conveyed from the first opening to the second opening. For example, the SpeedTube product is a seed delivery apparatus comprising an elongated housing, as shown in Figure 105.

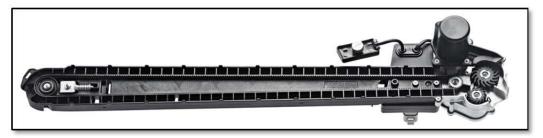


FIGURE 105

Additionally, for example, the SpeedTube product comprises an elongated housing having a first opening through which seed is received, as shown in Figure 106.



FIGURE 106

Further, for example, the SpeedTube product includes an elongated housing having a second opening through which seed exits, as shown in Figure 107.

Release It

The belt spins at a rate that increases and decreases with planter speed, so you get optimal seed placement. Planting is consistent, regardless of planter speed. There is no bounce or roll in the trench. Spacing accuracy and yield are preserved.



FIGURE 107

Moreover, for example, the SpeedTube product includes an elongated housing having an elongated interior chamber along which seed is conveyed from the first opening to the second opening, as shown in Figure 108.

Control It

The belt matches the speed of the planter and carries the seed to the bottom of the trench. SpeedTube doesn't rely on gravity to get the seed in the right place. It controls the seed from meter to furrow.

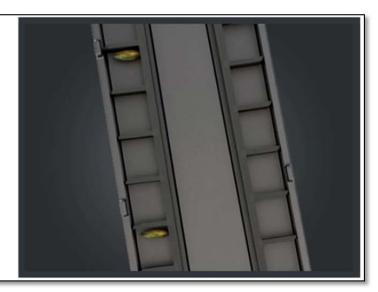


FIGURE 108

298. On information and belief, the Accused Infringing Products comprise a seed delivery apparatus comprising a first pulley. For example, the SpeedTube is a seed delivery apparatus comprising a first pulley, as shown in Figure 109.

Grab It

Feeder wheels at the top grab the seed from the disk, placing it onto the belt, and safely delivering it to the bottom of the trench.



FIGURE 109

299. On information and belief, the Accused Infringing Products comprise a seed delivery apparatus comprising a second pulley. For example, the SpeedTube is a seed delivery apparatus comprising a second pulley, as shown in Figure 110.

Release It

The belt spins at a rate that increases and decreases with planter speed, so you get optimal seed placement. Planting is consistent, regardless of planter speed. There is no bounce or roll in the trench. Spacing accuracy and yield are preserved.



FIGURE 110

300. On information and belief, the Accused Infringing Products comprise a seed delivery apparatus comprising an endless member driven by the first pulley and/or the second pulley, the endless member movable within the elongated interior chamber of the elongated

housing to receive seed from the first opening and convey seed to the second opening. For example, the SpeedTube is a seed delivery apparatus comprising an endless member driven by the first pulley and/or the second pulley, as shown in Figure 111.

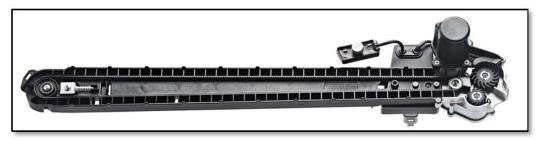


FIGURE 111

Additionally, for example, the endless member is moveable within the elongated interior chamber of the elongated housing to receive seed from the first opening and convey seed to the second opening, as shown in Figure 112.



FIGURE 112

301. On information and belief, the Accused Infringing Products comprise a seed delivery apparatus comprising a loading surface movable with respect to the endless member and positioned to contact and initially guide seed from the seed meter into the seed delivery apparatus. For example, the SpeedTube product is a seed delivery apparatus comprising a

loading surface movable with respect to the endless member and positioned to contact and initially guide seed from the seed meter into the seed delivery apparatus, as shown in Figure 113.



FIGURE 113

- 302. On information and belief, Defendant has been, and is still, knowingly and intentionally directly infringing, literally and/or under the doctrine of equivalents, one or more claims of the '031 Patent, including at least claim 1, by making, using, selling, offering to sell and/or importing the Accused Infringing Products in or into the United States, without authority. Thus, Defendant is liable for its infringement of the '031 Patent in violation of 35 U.S.C. § 271(a).
- 303. On information and belief, the Downstream Parties have been and are now infringing, literally and/or under the doctrine of equivalents, one or more claims of the '031 Patent, including at least claim 1, by making, using, selling, offering to sell and/or importing the Accused Infringing Products in or into the United States, without authority. Thus, the Downstream Parties are liable for their infringement of the '031 Patent in violation of 35 U.S.C. § 271(a).

- 304. On information and belief, Defendant did possess, and still possesses, knowledge and awareness that the Downstream Parties are infringing the '031 Patent as set forth in this Complaint.
- 305. On information and belief, Defendant has been, and is still, knowingly and intentionally inducing infringement, literally and/or under the doctrine of equivalents, of one or more claims of the '031 Patent, including at least claim 1, by actively encouraging the Downstream Parties to make, use, offer for sale, sell and/or import the Accused Infringing Products in or into the United States, without authority. For example, on information and belief, Defendant has actively and knowingly encouraged and facilitated, and continues to actively and knowingly encourage and facilitate, the Downstream Parties to directly infringe the '031 Patent by marketing and selling the Accused Infringing Products and instructing the Downstream Parties to combine the vSet Products with the SpeedTube product and make, use, sell, offer to sell, and/or import those products together. Thus, Defendant is liable as an active inducer of infringement in violation of 35 U.S.C. § 271(b).
- 306. On information and belief, Defendant has been, and is still, knowingly and intentionally contributorily infringing, literally and/or under the doctrine of equivalents, one or more claims of the '031 Patent, including at least claim 1, by making, using, selling, offering to sell and/or importing the Accused Infringing Products and/or one or more components of the Accused Infringing Products in or into the United States, without authority. On information and belief, Defendant did possess, and still possesses, knowledge and awareness that the Accused Infringing Products are especially made or adapted for use in an infringement of the '031 Patent, that the Accused Infringing Products include a material component for use in practicing the '031 Patent, and that the Accused Infringing Products are not a staple article or commodity of

commerce suitable for substantial non-infringing use. Thus, Defendant is liable for its infringement of the '031 Patent in violation of 35 U.S.C. § 271(c).

- 307. Deere has suffered damages as a result of the direct and indirect infringing activities of Defendant and will continue to suffer such damages as long as those infringing activities continue.
- 308. Pursuant to 35 U.S.C. § 284, Deere is entitled to damages adequate to compensate it for the infringement, but in no event less than a reasonable royalty.
- 309. Defendant's direct and indirect infringement has caused and will continue to cause irreparable harm to Deere, unless and until such infringement is enjoined by this Court.
- 310. Remedies at law are inadequate to compensate for that injury, with the balance of hardships between Deere and Defendant, and the public interest, warranting an injunction.

COUNT XII: INFRINGEMENT OF U.S. PATENT NO. 9,510,502

- 311. Deere re-alleges paragraphs 1 through 310, which are incorporated herein by reference.
- 312. The '502 Patent, entitled "Planting Unit for a Seeding Machine Having Blocking Member to Control Hand-Off of Seed From a Seed Meter to a Seed Delivery System," and naming Elijah B. Garner, Michael E. Friestad, and Nathan A. Mariman as its inventors, was duly and legally issued on December 6, 2016. Since that date, Deere has been and is still the owner and possessor of all rights pertaining to the '502 Patent.
- 313. On information and belief, the '502 Patent is valid, enforceable, and currently in full force and effect.
 - 314. Exemplary independent claim 13 of the '502 Patent recites the following:
 - 13. A method of transferring seed to a furrow with a seed delivery apparatus secured to a seeding machine, the method comprising:

receiving a seed into a housing through a first opening;

controlling movement of the seed within the housing in cooperation with movement of the seeding machine;

conveying the seed from the first opening to a second opening; and

discharging the seed through the second opening directly to the furrow,

wherein the seeding machine is operable in a seeding direction and at a seeding speed, and wherein discharging the seed through the second opening means discharging the seed with a directional component equal and opposite to the seeding direction and at a speed in the directional component approximately equal to the seeding speed.

- 315. On information and belief, Precision Planting infringes at least claim 13 of the '502 Patent by combining and using the Accused Infringing Products together.
- 316. On information and belief, to the extent the preamble of claim 13 of the '502 Patent is considered to be a limitation, Precision Planting uses the Accused Infringing Products to perform the step of transferring seed to a furrow with a seed delivery apparatus secured to a seeding machine. For example, Precision Planting uses the SpeedTube product to perform the step of transferring seed to a furrow, as shown in Figure 114.



FIGURE 114

Additionally, for example, Precision Planting uses the SpeedTube product to transfer seed to a furrow with a seed delivery apparatus, as shown in Figure 115.

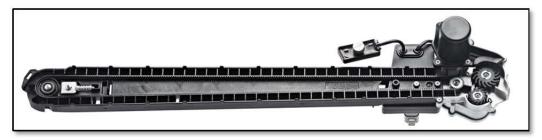


FIGURE 115

Additionally, for example, the seed delivery apparatus is secured to a seeding machine, as shown in Figure 116.

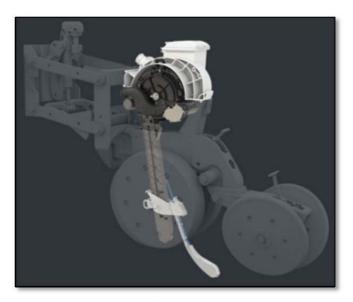


FIGURE 116

317. On information and belief, Precision Planting uses the Accused Infringing Products to perform the step of receiving a seed into a housing through a first opening. For example, Precision Planting uses the SpeedTube product to perform the step of receiving a seed into a housing through a first opening, as shown in Figure 117.

Grab It

Feeder wheels at the top grab the seed from the disk, placing it onto the belt, and safely delivering it to the bottom of the trench.



FIGURE 117

318. On information and belief, Precision Planting uses the Accused Infringing Products to perform the step of controlling movement of the seed within the housing in cooperation with movement of the seeding machine. For example, Precision Planting uses the SpeedTube product to perform the step of controlling movement of the seed within the housing, as shown in Figure 118.

Control It

The belt matches the speed of the planter and carries the seed to the bottom of the trench. SpeedTube doesn't rely on gravity to get the seed in the right place. It controls the seed from meter to furnity.

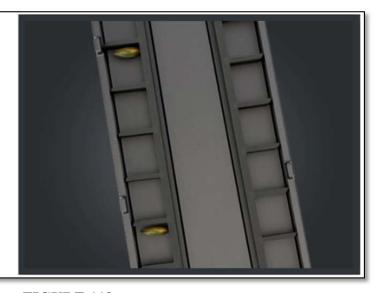


FIGURE 118

Additionally, for example, Precision Planting uses the SpeedTube product in cooperation with movement of the seeding machine, as shown in Figure 119.

Control It

The belt matches the speed of the planter and carries the seed to the bottom of the trench. SpeedTube doesn't rely on gravity to get the seed in the right place. It controls the seed from meter to furrow.

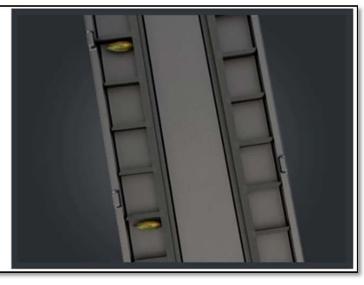


FIGURE 119

319. On information and belief, Precision Planting uses the Accused Infringing Products to perform the step of conveying the seed from the first opening to a second opening. For example, Precision Planting uses the SpeedTube product to perform the step of conveying the seed from the first opening to a second opening, as shown in Figure 120.

Release It

The belt spins at a rate that increases and decreases with planter speed, so you get optimal seed placement. Planting is consistent, regardless of planter speed. There is no bounce or roll in the trench. Spacing accuracy and yield are preserved.



FIGURE 120

320. On information and belief, Precision Planting uses the Accused Infringing Products to perform the step of discharging the seed through the second opening directly to the furrow. For example, Precision Planting uses the SpeedTube product to perform the step of discharging the seed through the second opening directly to the furrow, as shown in Figure 121.



FIGURE 121

321. On information and belief, Precision Planting uses the Accused Infringing Products as described above, wherein the seeding machine is operable in a seeding direction and at a seeding speed, and wherein discharging the seed through the second opening means discharging the seed with a directional component equal and opposite to the seeding direction and at a speed in the directional component approximately equal to the seeding speed. For example, Precision Planting uses the SpeedTube product such that the seeding machine is operable in a seeding direction and at a seeding speed, as shown in Figures 122A and 122B.

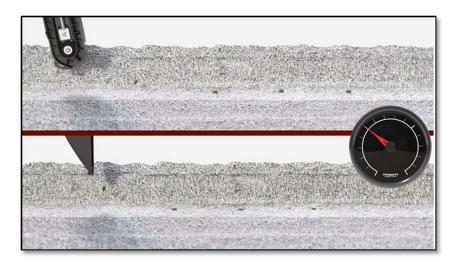


FIGURE 122A

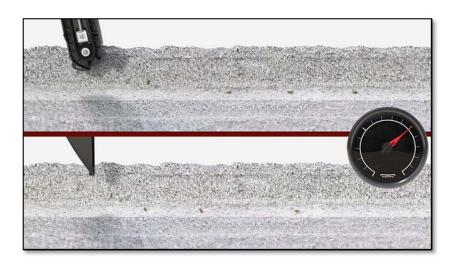


FIGURE 122B

Additionally, for example, Precision Planting uses the SpeedTube product such that discharging the seed through the second opening means discharging the seed with a directional component equal and opposite to the seeding direction and at a speed in the directional component approximately equal to the seeding speed, as shown in Figure 123.

Release It

The belt spins at a rate that increases and decreases with planter speed, so you get optimal seed placement. Planting is consistent, regardless of planter speed. There is no bounce or roll in the trench. Spacing accuracy and yield are preserved.



FIGURE 123

- 322. On information and belief, Defendant has been, and is still, knowingly and intentionally directly infringing, literally and/or under the doctrine of equivalents, one or more claims of the '502 Patent, including at least claim 13, by making, using, selling, offering to sell and/or importing the Accused Infringing Products in or into the United States, without authority. Thus, Defendant is liable for its infringement of the '502 Patent in violation of 35 U.S.C. § 271(a).
- 323. On information and belief, the Downstream Parties have been and are now infringing, literally and/or under the doctrine of equivalents, one or more claims of the '502 Patent, including at least claim 13, by making, using, selling, offering to sell and/or importing the Accused Infringing Products in or into the United States, without authority. Thus, the Downstream Parties are liable for their infringement of the '502 Patent in violation of 35 U.S.C. § 271(a).
- 324. On information and belief, Defendant did possess, and still possesses, knowledge and awareness that the Downstream Parties are infringing the '502 Patent as set forth in this Complaint.

- 325. On information and belief, Defendant has been, and is still, knowingly and intentionally inducing infringement, literally and/or under the doctrine of equivalents, of one or more claims of the '502 Patent, including at least claim 13, by actively encouraging the Downstream Parties to make, use, offer for sale, sell and/or import the Accused Infringing Products in or into the United States, without authority. For example, on information and belief, Defendant has actively and knowingly encouraged and facilitated, and continues to actively and knowingly encourage and facilitate, the Downstream Parties to directly infringe the '502 Patent by marketing and selling the Accused Infringing Products and instructing the Downstream Parties to combine the vSet Products with the SpeedTube product and make, use, sell, offer to sell, and/or import those products together. Thus, Defendant is liable as an active inducer of infringement in violation of 35 U.S.C. § 271(b).
- 326. On information and belief, Defendant has been, and is still, knowingly and intentionally contributorily infringing, literally and/or under the doctrine of equivalents, one or more claims of the '502 Patent, including at least claim 13, by making, using, selling, offering to sell and/or importing the Accused Infringing Products and/or one or more components of the Accused Infringing Products in or into the United States, without authority. On information and belief, Defendant did possess, and still possesses, knowledge and awareness that the Accused Infringing Products are especially made or adapted for use in an infringement of the '502 Patent, that the Accused Infringing Products include a material component for use in practicing the '502 Patent, and that the Accused Infringing Products are not a staple article or commodity of commerce suitable for substantial non-infringing use. Thus, Defendant is liable for its infringement of the '502 Patent in violation of 35 U.S.C. § 271(c).

- 327. Deere has suffered damages as a result of the direct and indirect infringing activities of Defendant and will continue to suffer such damages as long as those infringing activities continue.
- 328. Pursuant to 35 U.S.C. § 284, Deere is entitled to damages adequate to compensate it for the infringement, but in no event less than a reasonable royalty.
- 329. Defendant's direct and indirect infringement has caused and will continue to cause irreparable harm to Deere, unless and until such infringement is enjoined by this Court.
- 330. Remedies at law are inadequate to compensate for that injury, with the balance of hardships between Deere and Defendant, and the public interest, warranting an injunction.

PRAYER FOR RELIEF

WHEREFORE, Plaintiff Deere & Company respectfully requests that this Court enter judgment against the Defendant, granting the following relief:

- A. Declaring that Defendant has directly infringed, contributorily infringed, and induced infringement of, and is continuing to directly infringe, contributorily infringe, and induce infringement of, one or more claims of the '663, '199, '922, '429, '998, '955, '924, '906, '856,'799, '031, and '502 Patents;
- B. Permanently enjoining Defendant, together with its affiliates, subsidiaries, agents, officers, employees, directors, licensees, servants, successors, and assigns, from directly or indirectly infringing one or more claims of the '663, '199, '922, '429, '998, '955, '924, '906, '856,'799, '031, and '502 Patents;
- C. Awarding Deere damages adequate to compensate for Defendant's direct and indirect infringing activities, including supplemental damages for any post-verdict infringement up until entry of the final judgment with an accounting as needed, together with pre-judgment and post-judgment interest on the damages awarded;

- D. Awarding Deere enhanced damages under 35 U.S.C. § 284;
- E. Finding that this is an exceptional case, and awarding Deere its attorneys' fees in this action pursuant to 35 U.S.C. § 285; and
- F. Awarding Deere such other and further relief as the Court may deem just and proper.

JURY DEMAND

Plaintiff Deere & Company, demands a trial by jury as to all issues and causes of action so triable herein, pursuant to Federal Rule of Civil Procedure 38.

Dated: June 1, 2018

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