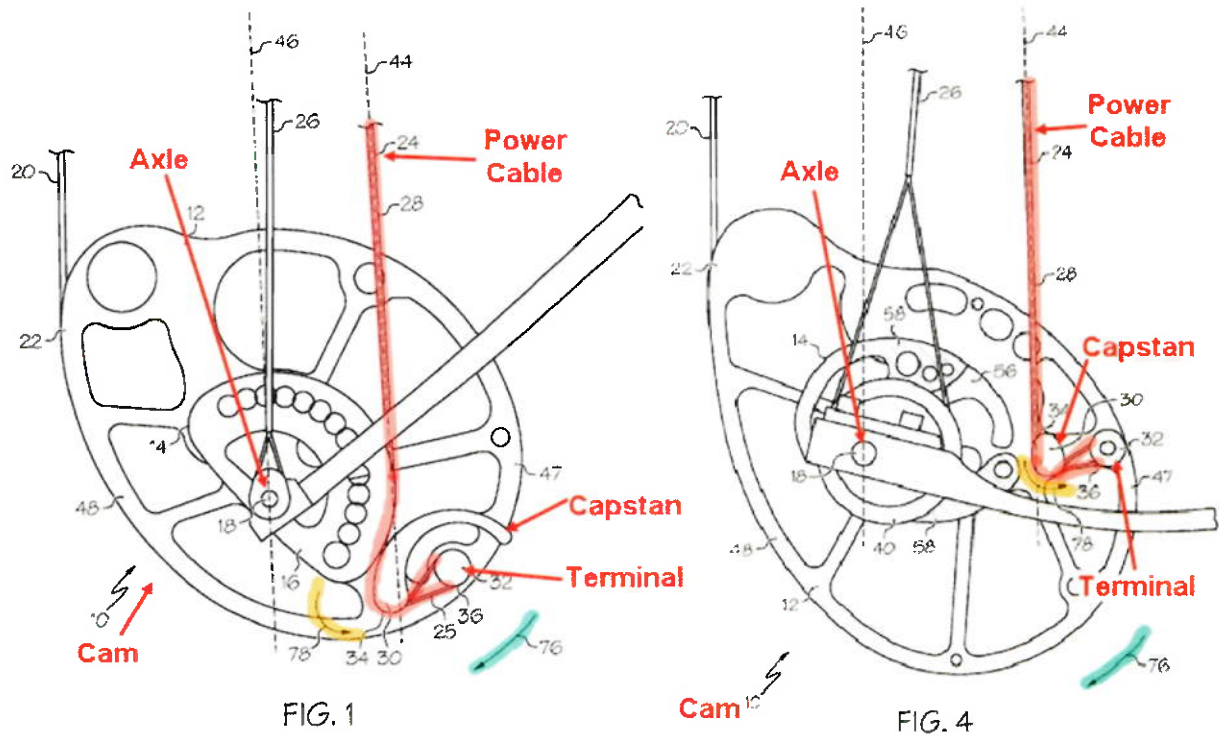


DECLARATION OF MATHEW A. MCPHERSON

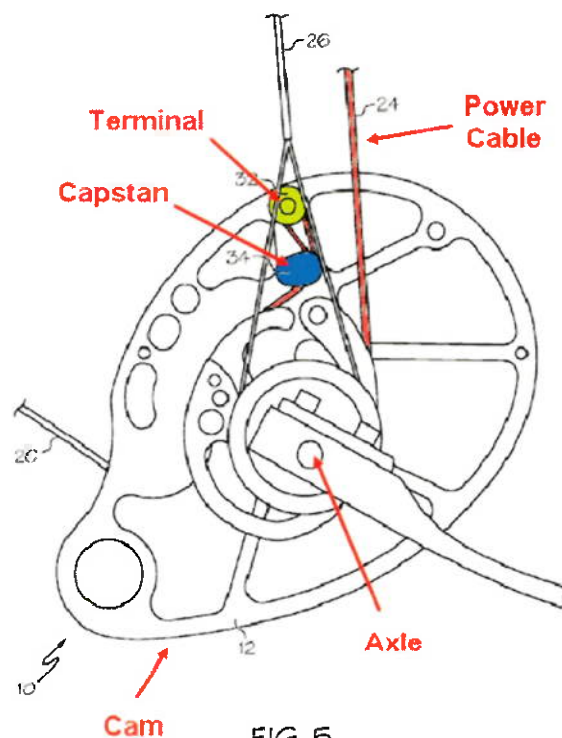
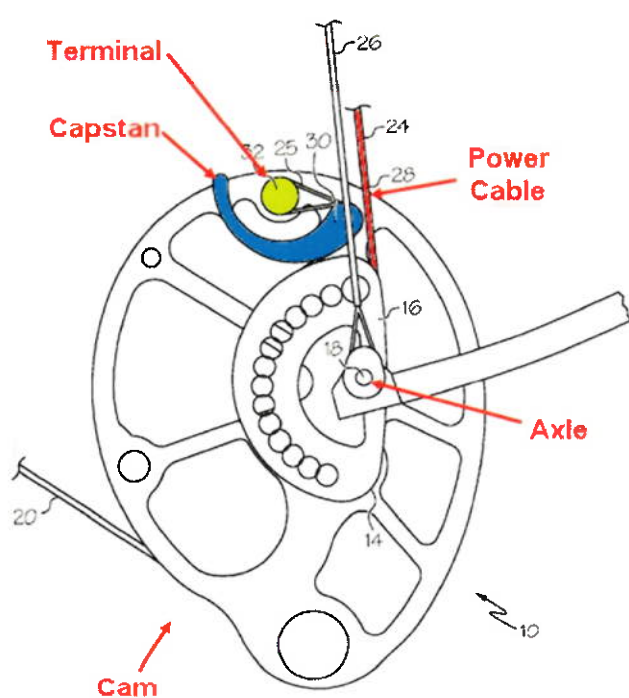
1. My name is Mathew A. McPherson. I am over 18 years of age, a resident of Wisconsin, and competent to make this declaration.
2. I am currently the owner and CEO of Mathews Archery, Inc. and member of MCP IP LLC, which are both located in Sparta, Wisconsin. I make this declaration based on my own knowledge, past experience, and my duties conducted within the ordinary course of business at Mathews Archery, Inc. If called upon, I could and would testify to all facts stated in this declaration.
3. Mathews Archery, Inc. is a corporation with its corporate headquarters and principal place of business in Sparta, WI.
4. I am the sole inventor of U.S. Patent Nos. 8,683,989; 9,354,017; and 9,909,831 (“Challenged Patents”).
5. I am also the sole inventor on U.S. Provisional Patent Application No. 61/247,473 (“Provisional Application”), filed on September 30, 2009, and from which the above patents claim priority.
6. I invented a compound bow cam design that I refer to as the “Reverse Wrap” cam design, and this cam design is the focus of the Challenged Patents. In

the Reverse Wrap cam design, the compound bow's power cable wraps around a capstan that is outboard from the power cable cam and is attached to a terminal post that is both outboard and set back from where the power cable wraps around the capstan. The power cable wraps outward in a "reverse" direction as compared to standard compound bow cams. This atypical outwards wrapping of the power cable also means that the power cable initially wraps in a direction that is opposite to a direction that the cam rotates as the bow is drawn. FIGS. 1 & 4 (reproduced below) from the Challenged Patents illustrate this concept. The figures show the bow in a brace position, with the cam axle and the terminal on opposite sides of the power cable (red). The red power cable is wrapped in the direction of the yellow arrow, while the cam rotates in the direction of the green arrow as the bow is drawn.



7. The Reverse Wrap configuration allows the cam to rotate a greater distance than if the power cable were terminated inboard of the power cable cam's perimeter and wrapped directly on to the power cable cam. This greater rotation, in turn, allows the bow designer more freedom in designing the cam to take up the power cable. The increased rotation is demonstrated in FIG. 2 (reproduced below), showing the cam in a fully drawn position. Note that the leading edge of the capstan (blue) is closer to the power cable (red) than the terminal post (yellow), and that the cam has rotated so far that the power cable is almost contacting itself. The Reverse Wrap configuration allows the terminal post and capstan to be positioned to allow this. If the

power cable were wrapped in the other direction, the necessary terminal placement would limit the rotation of the cam.



8. Prior to the filing date of the Provisional Application, I designed two bows with cams that included the Reverse Wrap feature of the Challenged Patents – the 2009 model year Mission Menace bow and the 2009 model year Mathews Monster bow. The Mission Menace was produced by my company, Mission Archery, which was an affiliate of, and now merged with, Mathews Archery, Inc. The cams depicted in the figures of the Challenged Patents and the Provisional Application show the cam designs of the

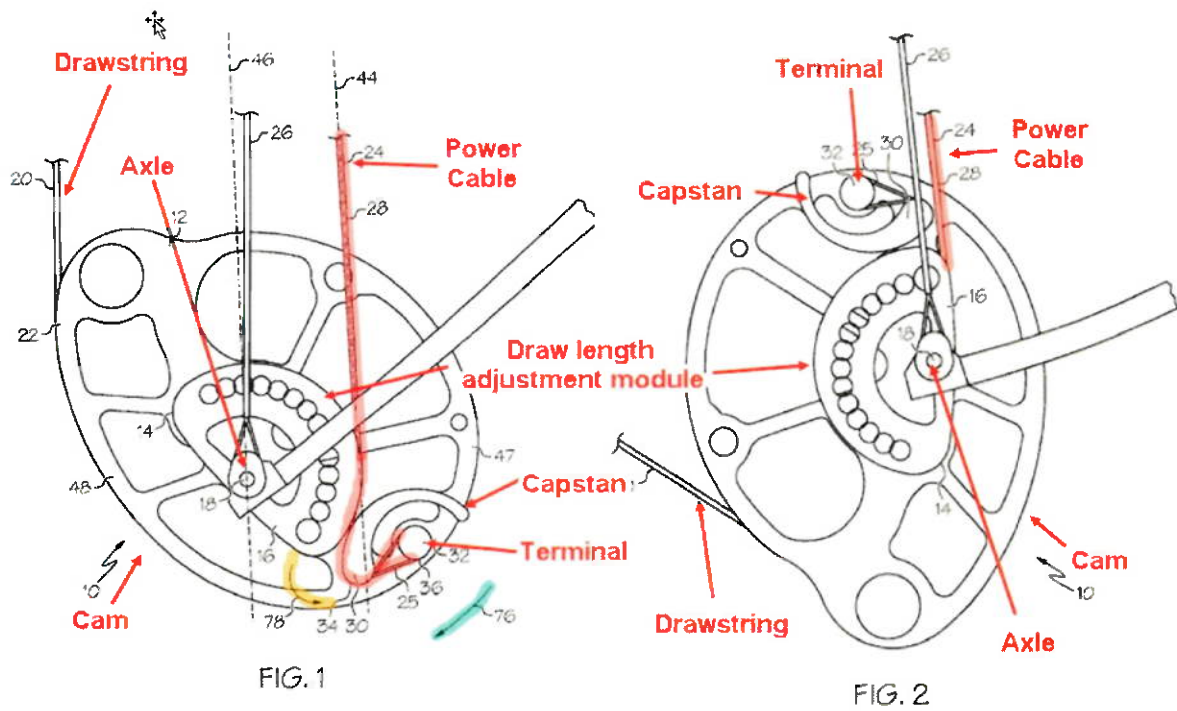
Mission Menace and Mathews Monster bows. FIGS. 1-3 were based off of the CAD drawings of the cams for the Mission Menace bow and FIGS. 4-6 were based off of the CAD drawings of the cams for the Monster bow.

9. The Mission Menace bow was designed in 2008 and launched in October 2008. Mathews Archery, Inc. shipped a Mission Menace bow to Bill Krenz, author of the Bow Report for *Inside Archery* magazine shortly after the Mission Menace was launched so that he could test the bow and publish a review in the magazine.

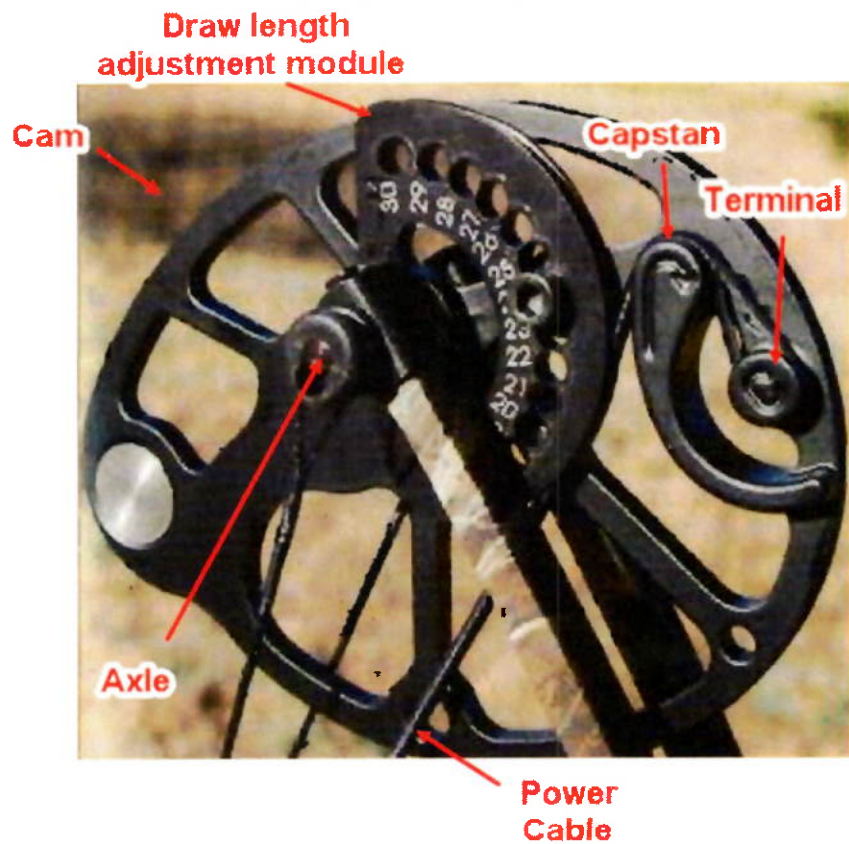
10. Bill Krenz's review of the 2009 Mission Menace bow appeared in the Bow Report article of the December 2008 issue of *Inside Archery* (designated EX2002). I have reviewed this article and confirmed that the bow described and pictured in the article is the 2009 Mission Menace bow.

11. The 2009 Mission Menace bow incorporated the Reverse Wrap on both upper and lower cams. The cams on the 2009 Mission Menace were substantively the same as those shown in FIGS. 1-3 of the Challenged Patents and the Provisional Application.

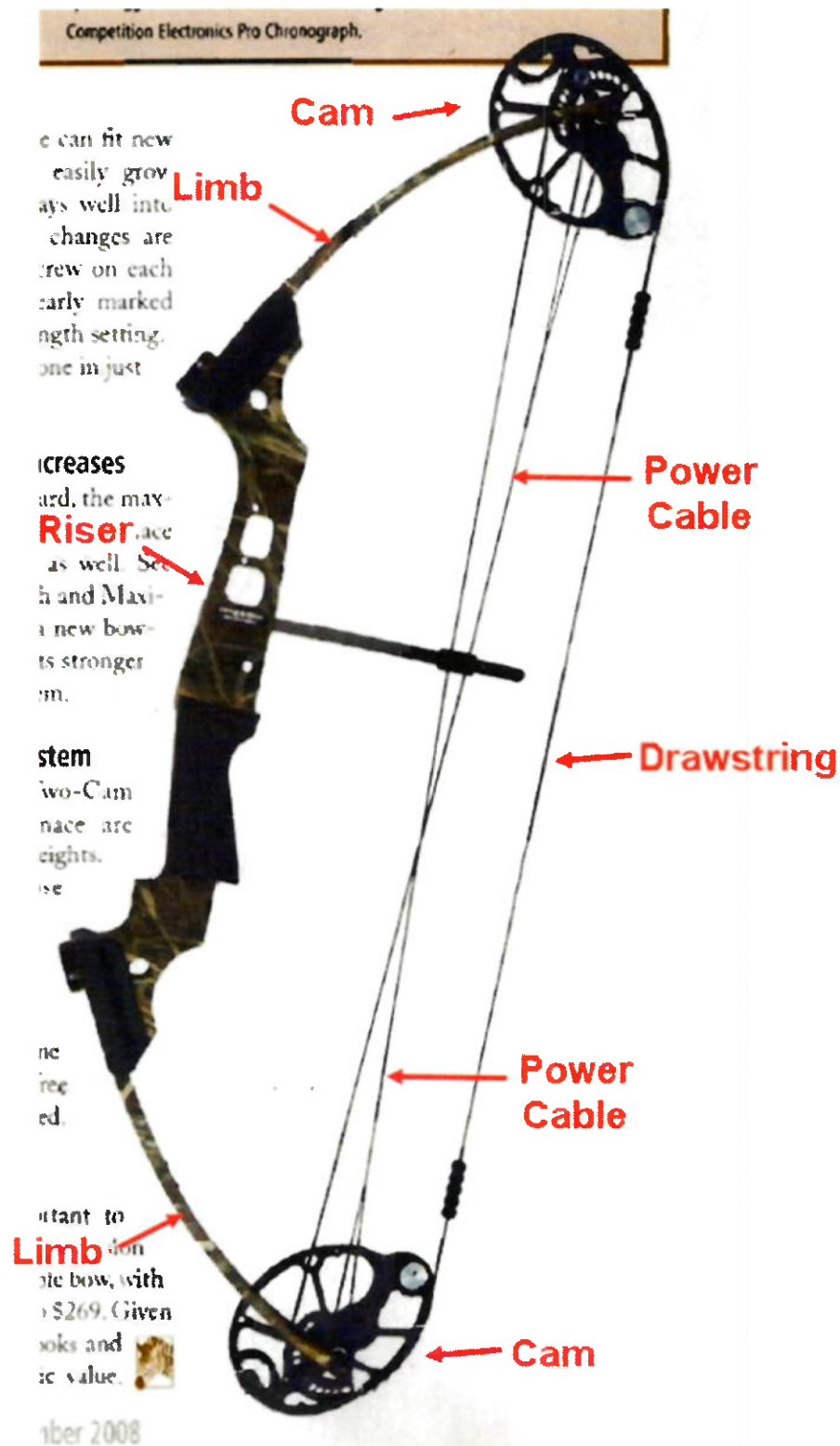
12.FIGS. 1 and 2 of the Challenged Patents are reproduced with annotations below along with annotated photographs of the 2009 Mission Menace bow from Bill Krenz's Bow Report article. The cams on the 2009 Mission Menace differed from the patent figures in that they included instructive markings on the cam and capstan for the bow shops and consumers. Like FIGS. 1-3, the terminal post was outboard of the capstan, which was outboard of the power cable cam. And, like FIGS. 1-3, the power cable was wrapped around the capstan in a direction opposite the rotational direction of the cam as the bow is drawn. This configuration placed the cam axle and the terminal on opposite sides of the power cable when the bow is in a brace position. When the Mission Menace bow was drawn, the Reverse Wrap configuration placed the capstan closer to the power cable extension (24 in the figures below) than the terminal. The 2009 Mission Menace also had a draw length adjustment module that was configured to pivot to make adjustments to the bow's draw length. The photos clearly show the module's adjustment holes and markings and the cap screw that locks the module in place at a set adjustment. The Reverse Wrap on the 2009 Mission Menace placed the capstan in between the power cable terminal post and the adjustment module. The adjustment module allowed for incremental draw length adjustments.



Patent FIGS. 1 and 2.



2009 Mission Menace Bow Report – Cam Photograph.

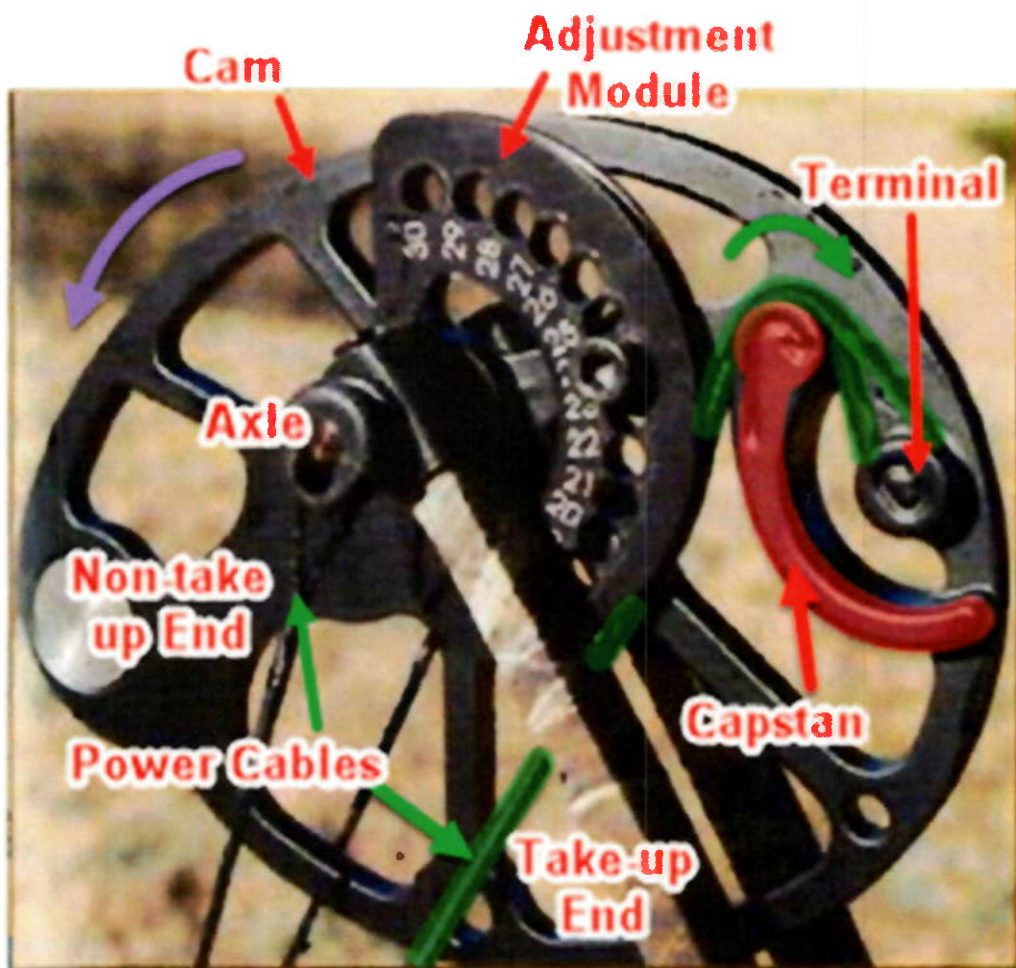


2009 Mission Menace Bow Report – Full Bow Photograph.

13. The photograph of the full bow (above) shows the 2009 Mission Menace bow in the brace position. As is typical for compound bows, the Mission Menace included upper and lower limbs connected to a riser, with rotating cams attached to the ends of each limb. A drawstring and two power cables extended between each cam. The cams are configured as mirror images of one another to accommodate this cabling configuration. In other words, the capstan, terminal, and adjustment module are mirrored on opposite sides of the top and bottom cams, so that when assembled to the bow, they are on the same side of the bow.

14. Each power cable of the 2009 Mission Menace had a take-up end and a non-take-up end (or static end). The take-up end was wrapped around the capstan and connected to the terminal on the cam as shown in the annotated photograph below. The non-take up end was connected to an anchor near the bow's axle. Due to the Reverse Wrap on the take-up end of the power cable, when the bow was in the brace position, the capstan and terminal were on an opposite side of the take-up end of the power cable from the axle. Additionally, when the bow was in the brace position, the Reverse Wrap placed the terminal a greater distance from the axle than the capstan was from the axle. Then, during the draw, the cam would rotate in the direction

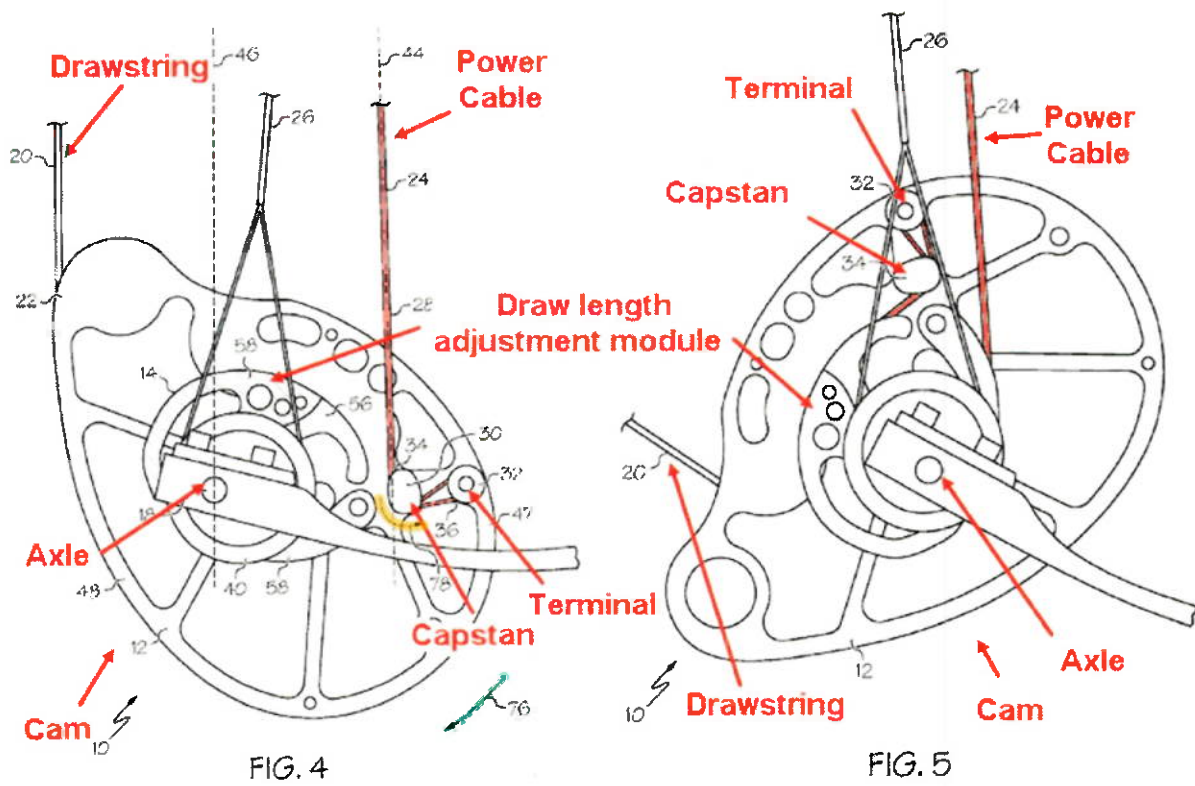
of the purple arrow (counter clockwise in the photograph). Because of the reverse wrap design the take-up end of the power cable was wrapped around the capstan in the direction of the green arrow (clockwise in the photograph) and opposite to the draw rotation of the cam. As the bow was drawn the take-up end of the power cable would wrap around a cam track in the adjustment module as the cam rotates.



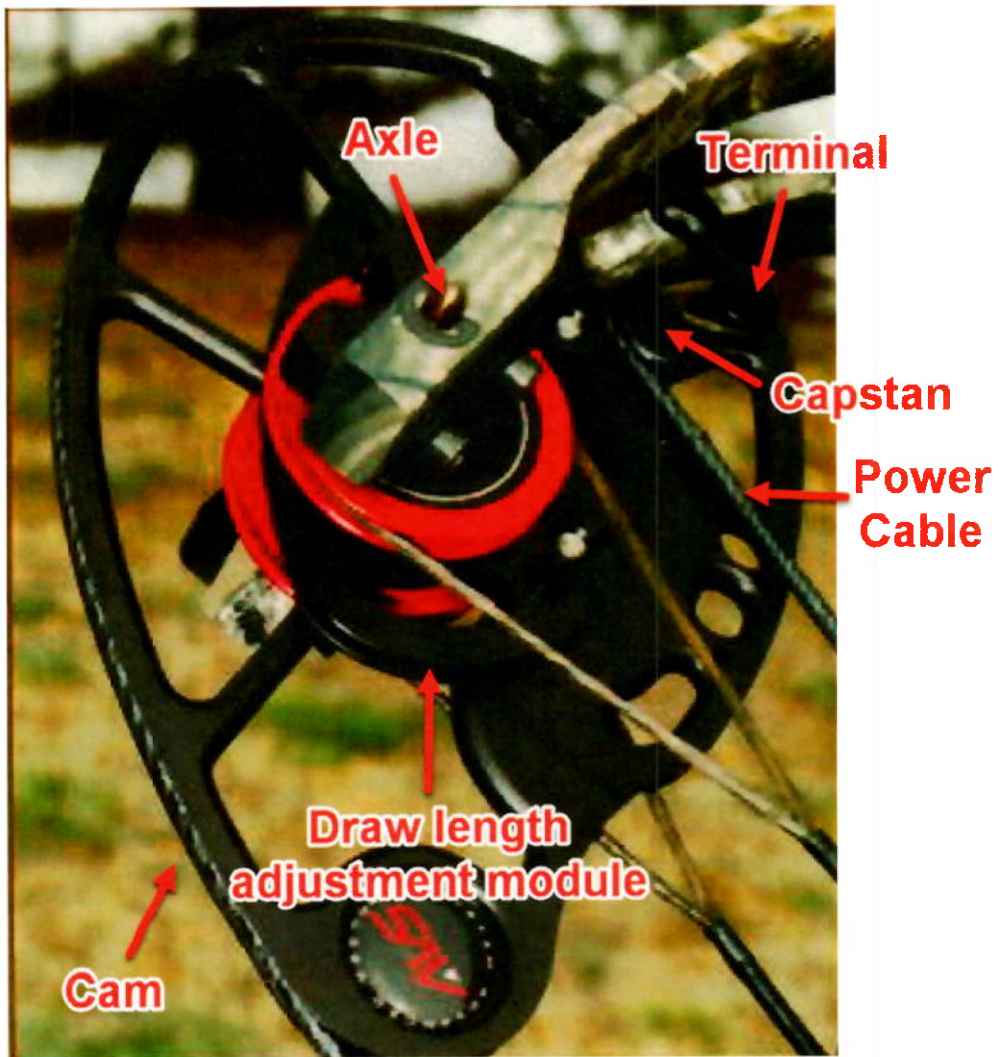
15. As with all of our new designs, the Mission Menace bow was tested for proper operation before being approved for production.
16. The Mathews Monster bow was designed and built as early as November 2008. The Mathews Monster bow's first sales occurred in early 2009.
17. Mathews Archery, Inc. shipped a Monster bow to Bill Krenz, author of the Bow Report for *Inside Archery* magazine, soon after the launch so that he could test the bow and publish a review in the magazine.
18. Bill Krenz's review of the Mathews Monster bow appeared in the Bow Report article of the June 2009 issue of *Inside Archery* (designated EX2003). I have reviewed this article and confirmed that the bow described and pictured in the article is the Mathews Monster bow.
19. Like the Mission Menace bow, the Mathews Monster bow also incorporated the Reverse Wrap on both upper and lower cams. The upper and lower cams of the Monster bow were also made as a mirror image of each other. The capstan, terminal, and adjustment module are mirrored on opposite sides of the top and bottom cams. The cams on the Monster bow were substantively

the same as those shown in FIGS. 4-6 of the Challenged Patents and the Provisional Application.

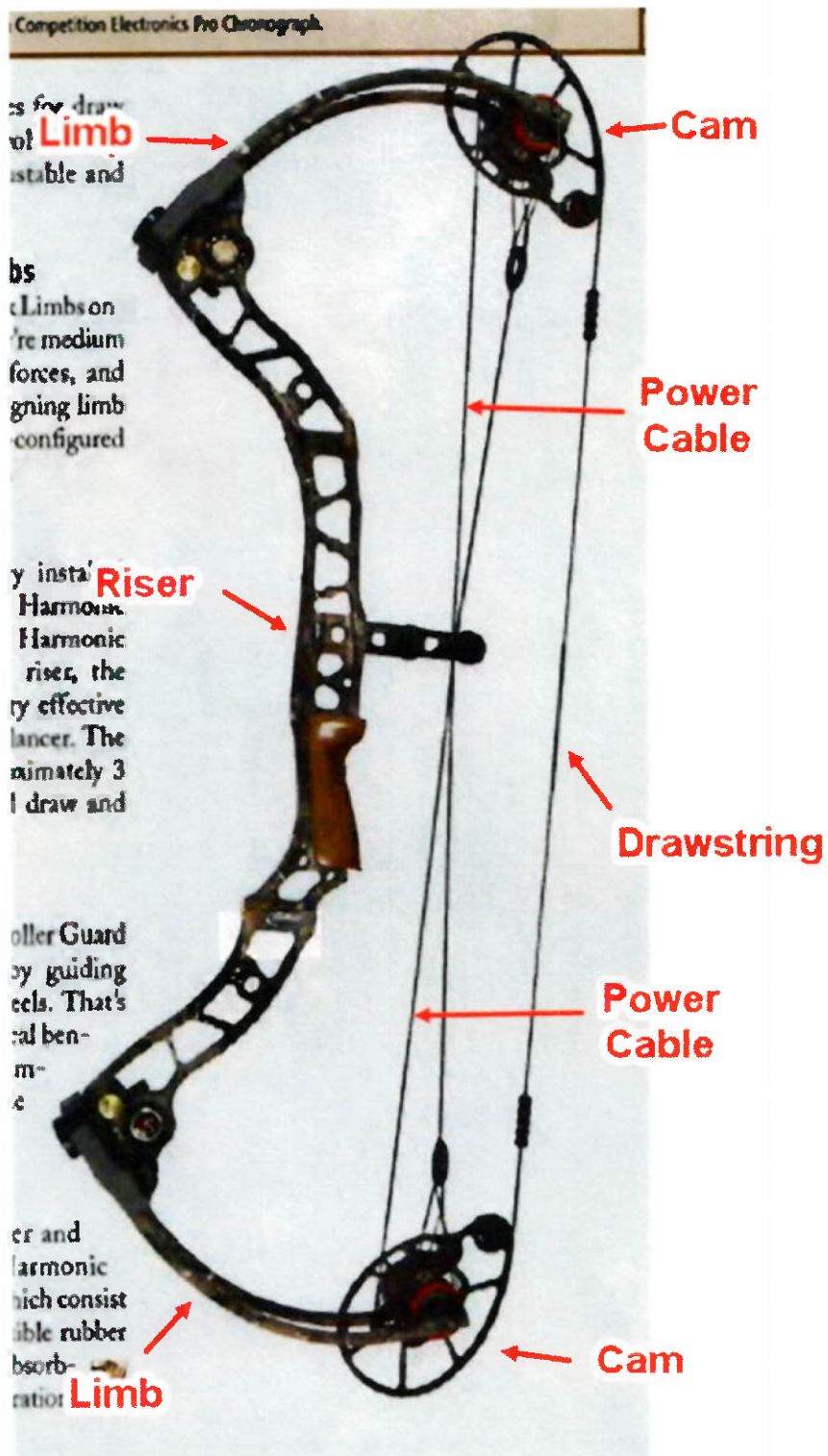
20. FIGS. 4 and 5 of the Challenged Patents are reproduced with annotations below along with annotated photographs of the Mathews Monster bow from Bill Krenz's Bow Report article. Like FIGS. 4-6, the terminal post was placed on the outer edge of the cam, outboard of the capstan. Like FIGS. 4-6, the power cable was wrapped around the capstan in a direction opposite the rotational direction of the cam when the bow was drawn. This configuration placed the cam axle and the terminal on opposite sides of the power cable when the bow is in a brace position. When the Monster bow was drawn, the Reverse Wrap configuration placed capstan closer to the power cable extension (24 in the figures below) than the terminal was. The Monster bow also had draw length adjustment interchangeable modules that were used to adjust the bow's draw length. The photos show the interchangeable module's screws that lock the module in place. The Reverse Wrap on the Monster bow placed the capstan in between the power cable terminal post and the interchangeable module.



Patent FIGS. 1 and 3.



Mathews Monster Bow Report – Cam Photograph.

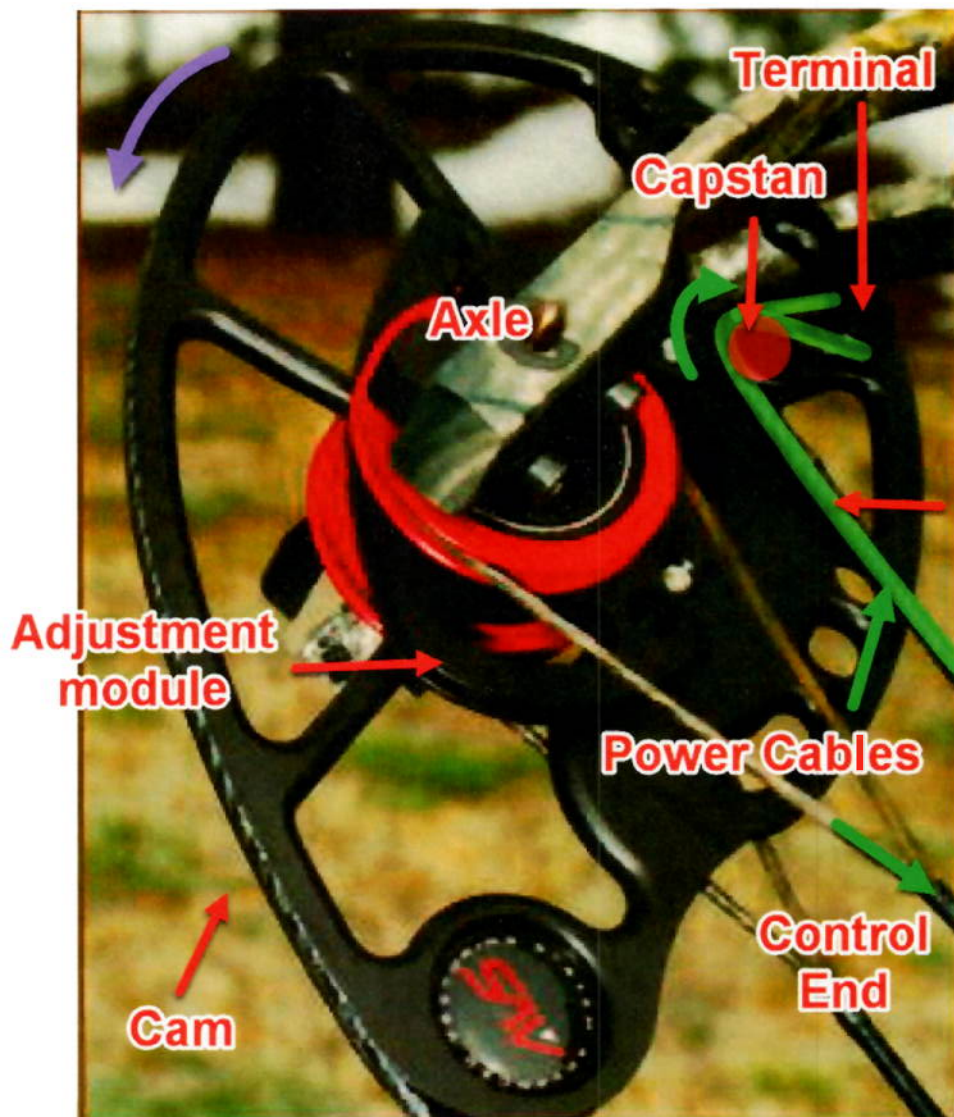


Mathews Monster Bow Report – Full Bow Photograph.

21. The photograph of the full bow (above) shows the Mathews Monster bow in the brace position. As is typical for compound bows, the Monster bow included upper and lower limbs connected to a riser, with rotating cams attached to the ends of each limb. A drawstring and two power cables extended between each cam. The cams are configured as mirror images of one another to accommodate this cabling configuration. In other words, the capstan, terminal, and adjustment module are mirrored on opposite sides of the top and bottom cams, so that when assembled to the bow, they are on the same side of the bow.

22. Each power cable of the Mathews Monster bow had a take-up and a control end. The take-up end wrapped around the capstan and was connected to the terminal on the cam as shown in the annotated photograph below. The control end was connected to an anchor near the bow's axle. Due to the Reverse Wrap on the take-up end of the power cable, when the bow was in the brace position, the capstan and terminal were on an opposite side of the take-up end of the power cable from the axle. Additionally, when the bow was in the brace position, the Reverse Wrap placed the terminal a greater distance from the axle than the capstan was from the axle. Then, during the draw, the cam would rotate in the direction of the purple arrow (counter

clockwise in the photograph). Because of the reverse wrap design the take-up end of the power cable was wrapped around the capstan in the direction of the green arrow (clockwise in the photograph) and opposite to the draw rotation of the cam. As the bow was drawn the take-up end of the power cable would wrap around a cam track in the adjustment module as the cam rotates.



23.As with all of our new designs, the Mathews Monster bow was tested for proper operation before being approved for production.

24.I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct to the best of my knowledge. I declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the full knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code.

DECLARATION OF MATHEW A. MCPHERSON
SIGNATURE PAGE

By: 
Mathew A. McPherson

Execution Date: 6/10/24