

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Brunnert et al.

Patent No.: 6,422,291

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For: ROLL-UP BLIND WITH STOWABLE
GUIDING MEMBERS FOR THE
WINDOW OF A VEHICLE

Examiner: B. M. Johnson

Petition for *Inter Partes* Review of U.S. Patent No. 6,422,291

Commissioner for Patents
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Petitioner hereby requests an *Inter Partes* Review of U.S. Patent No. 6,422,291
("the '291 patent") (Ex. A).

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I. Claim 17 is unpatentable under 35 U.S.C. § 103(a) as being obvious over Naruse (Ex. T) in view of Nishiwaki (Ex. E) or Knowles (Ex. F) or Burdick (Ex. G) or Koike (Ex. I) and further in view of Blondin (Ex. V)..... 37

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I. Grounds for Standing

Petitioner certifies that the patent sought for review, U.S. Patent No. 6,422,291 ("the '291 patent") (Ex. A), is available for *inter partes* review and that the petitioner is not barred or estopped from requesting an *inter partes* review of the patent.

II. Real-Party in Interest

Petitioner certifies that the real-party in interest is Macauto U.S.A. of 2343 Golfview Drive 101, Troy, MI, 48084.

III. Background

The '291 patent merely evergreens U.S. Patent No. 4,836,263 to Ament ("Ament") (Ex. B) with an obvious variation. Both patents are owned by BOS GmbH & KG ("BOS"). Ament is prior art to the '291 patent and, as the closest prior art, covers a substantial portion of the limitations of the '291 patent. An *Ex Parte* reexamination was filed July 9, 2011, and granted Aug. 3, 2011 as Control No. 90/011,790. While the Reexamination Order stated substantial new questions of patentability were raised in the Request, the Office Action failed to utilize the closest art, *i.e.*, Ament. Because of this, the Patent Owner never addressed the substantial overlap in claim elements. The failure to properly use Ament as a basis of obviousness was compounded by a failure to fully address the Patent Owner's declarations submitted Dec. 28, 2011. Specifically, the Patent Owner provided the Zimmermann Declaration (Ex. C) to address alleged secondary indicia of non-obviousness. The Zimmermann Declaration merely discussed how a window blind

allegedly within the scope of the '291 patent was used in various "high end automobiles". (Ex. C at ¶ 6.) At no time does this biased declaration address whether any of these or other vehicles used the similar window shade of the Ament patent. The Examiner did not require a declaration nor was one provided demonstrating the '291 patent's claimed invention was the only source of the alleged commercial success. There was no showing of any success over the prior art Ament patent's window blind, also owned by BOS.

Because the Examiner failed to properly rely on the prior art Ament patent in any rejection, BOS did not have to distinguish over Ament's substantial teaching of elements in the '291 patent. Moreover, because the Examiner did not properly rely on the prior art Ament patent, BOS did not have to properly distinguish any commercial sales of the '291 patent over the Ament patent, also owned by BOS. There was no sales data or analysis by an unbiased expert demonstrating commercial success over a commercial embodiment based on Ament. If the Examiner had properly relied on Ament, then BOS would have necessarily needed to demonstrate that the Ament's commercial embodiment was a failure in the automobile industry and that the only success was found in the '291 patent's commercial product. Given the Examiner's failures, BOS was allowed to skirt the purpose of the reexamination and continue to rely upon an otherwise unpatentable claim set.

The Examiner also failed to properly analyze the Hicks Declaration (Ex. D), which was also filed by BOS Dec. 28, 2011. Because the Examiner did not properly

rely on the prior art Ament patent, the Hicks Declaration was not forced to distinguish the substantial teachings in BOS's prior art Ament patent. (*See* Ex. D at ¶ 2.)

No matter the specific mechanical industry, the ordinary mechanical engineer is versed in each of the elements of the '291 patent as well as the elements found in the cited prior art. Importantly, there is not a single element to the '291 claims specifically reserved to the automotive industry. Pull rods are known throughout the mechanical arts; guides (wheels, rollers or slides) are known across the mechanical arts; electric motors employed with mechanical devices are known throughout the mechanical arts, etc. Because each element within the '291 patent was known and employed throughout the mechanical arts, one of ordinary skill within the art of mechanical engineering would draw upon the field of mechanical engineering for these known elements to achieve the results desired in the field to streamline or make more efficient any product.

For example, and as discussed below, the art encompassing the '291 and Ament patents was already concerned with vibrations on the windows and damages thereto. The field was already concerned with compactness of the product due to the limited space in the back window's hat deposit area as well as aesthetics since any apparatus would be visible in that area. To suggest that these known elements, *e.g.*, folding or retractable wheels, would not have been obvious to one of ordinary skill in light of the references, would be an injustice to the public.

Due to the Examiner's failure to rely upon the substantial teachings of BOS's prior art Ament patent, BOS was permitted to unfairly extend the patent rights over the public that was already achieved through Ament. Petitioner believes that the discussions below and the claim charts demonstrate that the '291 patent was obvious at least in light of BOS's own prior art Ament patent in combination with other obvious and ordinary mechanical art teachings. Petitioner believes that full and proper analysis and application of the cited prior art better serves the public's interest in avoiding any unwarranted and unfair extension of patent rights by BOS.

IV. Statutory Grounds for Challenge

Briefly, Petitioner hereby requests cancellation of each of claims 1 - 21 in the '291 patent. The attached claim charts and remarks include (1) the claims, (2) statutory grounds for the challenge, (3) construction of the claim language, (4) reasons for unpatentability, and (5) Exhibit numbers for supporting evidence.

The following are statutory grounds for the challenge and the prior art patent or publications relied upon:

A. Claims 1, 5, 8 - 16, and 18 - 20 are unpatentable under 35 U.S.C. § 103(a) as being obvious over Ament (U.S. Patent No. 4,836,263) (Ex. B), "Ament", in view of Nishiwaki (Japanese Utility Model S54-144521) (Ex. E), "Nishiwaki", or Knowles (U.S. Patent No. 4,254,850) (Ex. F), "Knowles", or Burdick (U.S. Patent No. 3,829,116) (Ex. G), hereinafter "Burdick".

Ament is a substantial duplicate of the subject patent's claims and teaches the elements of the above-identified claims with only slight differences. Ament teaches every element of independent claim 1 except for the particular type of retractable

guides of the subject patent's claims. While Ament has guide elements, they retract from a first extended position away from a hat deposit area of a vehicle to a second retracted position in a hat deposit area of a vehicle, not into the circumferential surface of the pull rod.

Nishiwaki (Ex. E) relates to the general knowledge within the automotive field regarding vibrations and dampening of vibrations related to windows and is prior art in the same field as Ament. Nishiwaki supplements Ament and emphasizes the importance of using freely rotating rollers (or wheels) to guide and dampen vibration. As explained below and in the claim charts, Nishiwaki's rollers retract as required by the claims. It would have been obvious to one of ordinary skill in the art at the time of the filing to combine the Nishiwaki retractable guides with Ament to create a system where the roller moved into and out of the circumferential surface of the stay for aesthetics and space savings. Knowles similarly teaches retractable wheels to minimize size and prevent snagging of the wheels on other objects. Other collapsible wheels, such as Burdick's for an air cushion transporter that retract within a housing when not in use were also well known. It would have been obvious to one of ordinary skill in the art at the time of the application to combine the retractable wheels of Knowles or Burdick to create a system where the roller moved into and out of the circumferential surface of the stay.

These references are applied in the attached claim chart demonstrating the obviousness of the claims. Claim construction is indicated in the attached claim chart.

Where not specified, claims are construed according to their ordinary meaning. The following is a detailed analysis of the applicability of the cited references to the claims.

Regarding **claim 1**, Ament discloses: (1) "[a] roll-up window blind for a window of a motor vehicle, the window having an associated window pane" (Ex. B at C. 1, ll. 57 - 62); (2) "a rotatable winding shaft" (Ex. B at C. 3, ll. 27 - 28); (3) "a blind material having parallel first and second edges with the first edge being connected to the winding shaft for movement between a reeled-in position and a reeled-out position" (Ex. B at C. 3, ll. 16 - 28); (4) "a first drive arrangement which pre-stresses the winding shaft in a direction corresponding to moving the blind material to the reeled-in position" (Ex. B at C. 3, ll. 41 - 47); (5) "a pull rod fastened to the second edge of the blind material" (Ex. B at C. 3, ll. 31 - 36); and (6) "at least one deflection-resistant actuating element for transfer by an associated second drive arrangement between a first position in which the pullrod is disposed adjacent the winding shaft and a second position in which the pullrod is disposed relatively further away from the winding shaft". (Ex. B at C. 3, ll. 48 - 51 and Fig. 1.)

Ament does not teach "two guide elements for guiding the pull rod on the window pane, the guide elements being disposed in spaced relation to each other and being supported on the pull rod by corresponding bearing arrangements for movement between a first retracted position and a second guide position, wherein in the first retracted position the guide elements are retracted with respect to a circumferential surface of the pull rod and in the second guide position the guide

element project beyond the circumferential surface of the pull rod in order to guide the pull rod on the window pane as the blind material moves from the reeled-in position to the reeled-out position", *i.e.*, specific retractable guides. Ament, however, discloses that "to avoid vibration of the lever elements 15 and thus of the web 11 about an axis parallel to the wind-up roller 8 in the fully extended position of the web, two holding elements 53 are provided." (Ex. B at C. 7, ll. 1 – 8.) These holding elements are actually guide elements that retract into the hat deposit area of the vehicle when not in use.

Nishiwaki (Ex. E) cures any possible deficiency of Ament. Nishiwaki discloses that "roller 4 can freely rotate with its shaft 4a being installed in elongated hole 5a of holder 5 and at the same time, its shaft can move in direction of vibration window glass 1, *i.e.*, perpendicular to the plane of the window in said elongated hole 5a." (Ex. E at p. 1, ll. 50 - 52.) One of ordinary skill in the art would be motivated to use the technique of Nishiwaki to limit vibration. Importantly, the roller 4 and the shaft 4a, as seen in FIG. 2 (Ex. E), demonstrate that multiple positions are encompassed. This includes a second guide position, as seen in FIG. 2. (Ex. E) Furthermore, roller 4 and shaft 4a move to a first retracted position when pushed back in the elongated hole 5a. This retracted position would provide, for example, better aesthetics, better contact over a changing distance between the roller attachment and the window (as in Nishiwaki), and would avoid catching upon objects placed in the automobile's hat

deposit area. When roller 4 and shaft 4a are in a first retracted position, roller 4 is well within the circumferential surface of holder 5. (Ex. E at Fig. 2.)

The term "circumferential surface" is a broad term. Given its broadest reasonable interpretation, it means "of, at, or near the circumference; surrounding". (See Ex. H at p. 2.) Thus, the guide, wheels, and rollers of Nishiwaki, Knowles, and Burdick fully meet the claim element relating to "circumferential surface". In re Scroggie, 442 Fed.Appx. 547, 550 (Fed. Cir. 2011) ("This court permits the PTO to use dictionary definitions in tandem with the specification and prosecution history to enlighten the broadest reasonable interpretation of a claim term") (unpublished); In re Trans Texas Holdings Corp., 498 F.3d 1290, 1299 (Fed. Cir. 2007) (affirming use of dictionary definition because it was a reasonable definition and therefore within the broadest reasonable definition).

Furthermore, it would have been obvious to one of ordinary skill in the art at the time of the application to include moveable rollers in automotive systems. For example, Koike (JP Publication of Patent Application S58-20515) (Ex. I), "Koike", shows an alternative system with a moveable roller. Koike teaches "a movable arm 21 having a roller 22 disposed on the distal end thereof is attached to the inside of 35 the door body 1." (Ex. I at C. 4, ll. 32 - 35.)

A practitioner searching for a method of hiding or limiting the needed clearance for a guide or wheel would have been motivated to search out other moveable wheels, such as those taught by Koike. Koike teaches retractable guide

wheels for automotive windows that retract in response to pressure. It would have been obvious to one of ordinary skill in the art at the time of the application to combine Koike's retractable guide with Ament to create a system where the roller moved into and out of the circumferential surface of the stay.

It would have been obvious to one of ordinary skill in the art at the time of the application to combine Nishiwaki's moveable roller with Ament to create a system where the roller moved into and out of the circumferential surface of the stay, especially since Ament and Nishiwaki relate to automotive window systems.

Furthermore, Knowles teaches retractable wheels in a related art. Knowles teaches that "when the wheeling handle 100 is fully extended the wheels 111 are extended, but when the horizontal portion 101 of wheeling handle 100 is stored in recess 101a the vertical members 102 are stored" retracted in the case. (Ex. F at C. 2, ll. 11 - 16.) A practitioner searching for a method of hiding or limiting the needed clearance for a guide or wheel would have been motivated to search out other collapsible wheels, such as those taught by Knowles. Knowles teaches retractable wheels to minimize size and prevent snagging of the wheels on other objects. It would have been obvious to one of ordinary skill in the art at the time of the application to combine the retractable wheels of Knowles with the roller/stay combination of Ament to create a system where the roller moved into and out of the circumferential surface of the stay.

Additionally, Burdick teaches retractable guide wheels in a related art. Burdick teaches that the guide wheel should be retractable "to achieve lateral movement when desired and also to permit deflation of the air bearings without damage to the guide mechanism." (Ex. G at C. 1, ll. 27 - 30.) Burdick teaches retractable guide wheels for an air cushion transporter that retract within a housing when not in use. It would have been obvious to one of ordinary skill in the art at the time of the application to combine the Burdick's retractable guide with Ament to create a system where the roller moved into and out of the circumferential surface of the stay and thereby hide or limit the needed clearance for a guide or wheel, as taught by Burdick

Moreover, one of ordinary skill in the art at the time of the invention would have been aware of retractable guides for various applications. The level of skill of one of ordinary skill in the art would be that of a mechanical engineer or of similar knowledge. A mechanical engineer would have looked to related fields, such as case design, airplane landing gear, shoe mounted wheels, etc. to find compact guides or supports that would minimize size, prevent snagging, or provide a more streamlined appearance. (*See also* U.S. Patent No. 2,183,105 (Ex. J at p. 1, C. 1, ll. 12 - 16 and p. 1, C. 2, l. 48 - p. 2, C. 1, l. 9); U.S. Patent No. 3,402,802 (Ex. K at C. 2, ll. 28 - 45); Chinese Patent Application No. CN19922034778U (Ex. L at p. 4, l. 50 - p. 5, l. 3 and Fig. 4); Great Britain Patent No. 424,204 (Ex. M at p. 2, ll. 85 - 102 and Fig. 2); U.S. Patent No. 2,779,049 (Ex. N at C. 3, ll. 28 - 40 and Figs. 11 - 13); U.S. Patent No. 3,705,731 (Ex. O at C. 3, ll. 45 - 63 and Fig. 2); U.S. Patent No. 5,119,872 (Ex. P at C.

2, ll. 38 - 44); U.S. Patent No. 2,196,946 (Ex. Q at p. 1, C. 2, ll. 43 - 47 and Figs. 2 - 3); U.S. 3,057,636 (Ex. R at C. 1, ll. 33 - 38 and C. 2, ll. 50 - 57) as well as other references.) It would have been obvious to look to each of these fields as they each describe retractable guides for aesthetic purposes, as pointed out in the '291 patent. Furthermore, it was known that retractable guides could produce a compact configuration for storage in small spaces, such as the hat deposit area of a car. Additionally, it was known to use retractable guides or wheels to produce a product with less protruding elements with the potential to catch or snag on other objects. The concept of retractable wheels is well-known across many mechanical fields, and is demonstrated at least by these references. Therefore, claim 1 is obvious over the combination of references.

Regarding **claim 5**, Ament discloses "wherein the first drive arrangement is a spring motor which is located inside the winding shaft." (Ex. B at C. 3, ll. 41 - 47.)

Regarding **claim 8**, Ament discloses "wherein each actuating element comprises an actuating lever pivotably supported beside the winding shaft, each actuating lever having a free end that cooperates with the pullrod and being pivotable from a first position in which the actuating lever extends about parallel to the winding shaft into a second position in which the actuating lever is at about a right angle to the winding shaft." (Ex. B at C. 3, ll. 48 - 51 and Fig. 1.)

Regarding **claim 9**, Ament discloses "wherein the guide elements comprise slide skids." (Ex. B at C. 7, ll. 1 - 8.) One of ordinary skill in the art at the time of the

invention would have recognized that slide skids could be utilized instead of rollers if the lower friction provided by rollers would not be necessary. One of ordinary skill in this art would have known that slide skids are capable of guiding an element along a window. Indeed, slides would be less mechanically complex and cheaper to manufacture.

Regarding **claim 10**, Nishiwaki discloses "wherein the guide elements comprise rotatable rollers." (Ex. E at p.1, ll. 50 - 51.) In Nishiwaki, roller 4 and shaft 4a move to a first retracted position when pushed back in the elongated hole 5a. (Ex. E at FIG. 2.) This retracted-guide position function is well appreciated in the automotive industry, for example, for better aesthetics, for better contact over a changing distance between the roller attachment and the window (as in Nishiwaki), or to avoid catching upon objects placed in the hat deposit area of the automobile.

Regarding **claim 11**, Nishiwaki discloses "wherein each bearing arrangement includes a slide-block guide." (Ex. E at p.1, ll. 50 - 51.)

Regarding **claim 12**, Nishiwaki discloses "wherein the side-block guide has a curved guide slot for leading the guide element along a path." (Ex. E at p.1, ll. 50 - 51.) Nishiwaki discloses a straight guide slot. One of ordinary skill in the art at the time of the invention, however, would recognize that a curved guide slot would provide various benefits over a straight guide slot. For example, a curved guide slot could be utilized where a non-linear change in position or force was required, such as on a curved window.

Regarding the **claim 13** limitation "wherein the guide slot is curved in a continuous form", while Nishiwaki discloses a straight guide slot (Ex. E at p.1, ll. 50 - 51.), as discussed above in relation to claim 12, one of ordinary skill in the art at the time of the invention would recognize that a continuously curved slot would provide various benefits: for example, a curved guide slot could be utilized where a non-linear change in position or force was required, such as on a curved window.

Regarding the **claim 14** limitation, Nishiwaki discloses "wherein the guide slot has an L-shaped form." While Nishiwaki discloses a straight guide slot (Ex. E at p.1, ll. 50 - 51.), as discussed above in relation to claim 12, one of ordinary skill in the art at the time of the invention would recognize that an L-shaped guide slot would provide benefits, for example, an L-shaped guide slot could be utilized where a non-linear change in position or force was required, such as on a curved window.

Regarding **claim 15**, Ament discloses "each bearing arrangement includes a bearing carrier which is pivotable about a bearing axis." (Ex. B at C. 3, ll. 26 - 27.)

Regarding **claim 16**, Ament discloses "the bearing axis extends approximately parallel to a plane defined by the blind material in the reeled-out position." (Ex. B at C. 3, ll. 26 - 27.)

Regarding **claim 18**, Nishiwaki discloses "wherein each guide element has and [sic] associated pre-stressing device for pre-stressing the guide element toward the second guide position." (Ex. E at p. 1, ll. 11 - 14 and p. 1, l. 50 - p. 2, l. 5.)

Regarding **claim 19**, Nishiwaki discloses "wherein each bearing arrangement has an associated pre-stressing device for pre-stressing the guide element toward the second guide position." (Ex. E at p. 2, ll. 1 - 2.)

Regarding **claim 20**, Nishiwaki discloses "wherein the pre-stressing device includes a bending spring." (Ex. E at p. 1, ll. 11 - 14; and p. 1, l. 50 - p. 2, l. 5.)

For at least these reasons, claims 1, 5, 8 - 16, and 18 - 20 are unpatentable under 35 U.S.C. § 103(a) as being obvious over Ament in view of Nishiwaki or Knowles or Burdick.

B. Claims 1, 2, 5, 8 - 16, and 18 - 21 are unpatentable under 35 U.S.C. § 103(a) as being obvious over Nagase (JP Patent Publication No. H9-207565) (Ex. S), "Nagase", in view of Nishiwaki (Ex. E) or Knowles (Ex. F) or Burdick (Ex. G) or Koike (JP Publication of Patent Application S58-20515) (Ex. I), "Koike".

Nagase (Ex. S) relates to automotive windows and substantially teaches the elements of the above-identified claims. Nagase teaches every element of independent claim 1 except the specific location of the retracting guides. While Nagase has guide elements that retract, they retract from a first extended position away from a hat deposit area of a vehicle to a second retracted position at the circumferential surface of longitudinal case (16) in a hat deposit area of a vehicle, not into the circumferential surface of the pull rod. (*See* Ex. S at Figs. 1, 3 and 4.)

As described above in Section IV(A), Nishiwaki relates to the general knowledge within the automotive field regarding vibrations and dampening of vibrations relating to windows. Nishiwaki supplements Nagase and emphasizes the importance of using freely rotating rollers (or wheels) to guide and dampen vibration.

Furthermore, Knowles teaches retractable wheels to minimize size and prevent snagging of the wheels on other objects. Similarly, Burdick teaches retractable guide wheels for an air cushion transporter that retract within a housing when not in use and Koike teaches retractable guide wheels for automotive windows that retract in response to pressure. It would have been obvious to one of ordinary skill in the art at the time of the application to combine the retractable elements of Nishiwaki, Knowles, Burdick or Koike with the roller/stay combination of Nagase to create a system where the roller moved into and out of the circumferential surface of the stay.

These references are applied to the above-indicated claims in the attached claim chart demonstrating the obviousness of the claims. Claim construction is indicated in the attached claim chart. Where not specified, claims are construed according to their ordinary meaning. The following is a detailed analysis of the applicability of the cited references to the claims.

Regarding **claim 1**, Nagase discloses: (1) "[a] roll-up window blind for a window of a motor vehicle, the window having an associated window pane" (Ex. S at p. 4, l. 53); (2) "a rotatable winding shaft" (Ex. S at p. 4, ll. 69 - 72); (3) "a blind material having parallel first and second edges with the first edge being connected to the winding shaft for movement between a reeled-in position and a reeled-out position" (Ex. S at p. 4, ll. 69 - 72); (4) "a first drive arrangement which pre-stresses the winding shaft in a direction corresponding to moving the blind material to the reeled-in position" (Ex. S at p. 4, ll. 73 - 79); (5) "a pull rod fastened to the second

edge of the blind material" (Ex. S at p. 5, ll. 72 - 74); and (6) "at least one deflection-resistant actuating element for transfer by an associated second drive arrangement between a first position in which the pullrod is disposed adjacent the winding shaft and a second position in which the pullrod is disposed relatively further away from the winding shaft". (Ex. S at p. 5, ll. 1 - 4 and p. 5, ll. 25 - 28.)

Nagase does not teach "two guide elements for guiding the pull rod on the window pane, the guide elements being disposed in spaced relation to each other and being supported on the pull rod by corresponding bearing arrangements for movement between a first retracted position and a second guide position, wherein in the first retracted position the guide elements are retracted with respect to a circumferential surface of the pull rod and in the second guide position the guide element project beyond the circumferential surface of the pull rod in order to guide the pull rod on the window pane as the blind material moves from the reeled-in position to the reeled-out position", *i.e.*, retractable guides. Nagase does, however, disclose that a portion of rollers (68) protrudes outside of the circumferential surface of guide member (60). (Ex. S at Fig. 5.) Nagase further discloses that "[w]hen guide member 60 is pushed up to a predetermined position and guide roller 68 comes into contact with rear window glass 14, guide member 60 moves in parallel with rear window glass 14 while guide roller 68 rotating along rear window glass 14". (Ex. S at p. 6, ll. 15 - 21.) These rollers are guide elements and they retract into the hat deposit area of the vehicle when not in use.

Nishiwaki cures any possible deficiency of Nagase. Nishiwaki discloses that "[s]aid roller 4 can freely rotate with its shaft 4a being installed in elongated hole 5a of holder 5 and at the same time, [and] its shaft can move in direction of vibration window glass 1, i.e., perpendicular to the plane of the window in said elongated hole 5a." (Ex. E at p. 1, ll. 50 - 52.) Thus, one of ordinary skill in the art would be motivated to use the technique of Nishiwaki to limit vibration. More importantly, the roller 4 and the shaft 4a, as seen in FIG. 2, demonstrate that multiple positions are encompassed. This includes a second guide position, as seen in FIG. 2. (Ex. E) Furthermore, roller 4 and shaft 4a move to a first retracted position when pushed back in the elongated hole 5a. This retracted-guide position function is well appreciated in the automotive industry, for example, for better aesthetics, for better contact over a changing distance between the roller attachment and the window (as in Nishiwaki), or to avoid catching upon objects placed in the hat deposit area of the automobile. Consequently, when roller 4 and shaft 4a are in a first retracted position, roller 4 is well within the circumferential surface of holder 5. (Ex. E at Fig. 2.)

As described above in Section IV(A), the term "circumferential surface" is a broad term. When given its broadest reasonable interpretation, it means "of, at, or near the circumference; surrounding". (See Ex. H at p. 2.) Therefore, the guide, wheels, and rollers of Nishiwaki, Knowles, Burdick and Koike fully meet the claim element relating to "circumferential surface". It would have been obvious to one of ordinary skill in the art at the time of the application to combine the moveable roller

of Nishiwaki with the roller/stay combination of Nagase to create a system where the roller moved into and out of the circumferential surface of the stay.

As described above in Section IV(A), a practitioner searching for a method of hiding or limiting the needed clearance for a guide or wheel would have been motivated to search out other collapsible wheels, such as those taught by Knowles, Burdick or Koike. A mechanical engineer would have looked to related fields, such as case design, airplane landing gear, shoe mounted wheels, etc. to find compact guides or supports that would minimize size, prevent snagging, or provide a more streamlined appearance. Thus, claim 1 was obvious over the reference combination.

Regarding **claim 2**, Nagase discloses a winding shaft "supported in a housing having an outlet slot for the blind material." (Ex. S at p. 4, ll. 62 - 63 and Fig. 4.)

Regarding **claim 5**, Nagase discloses "wherein the first drive arrangement is a spring motor which is located inside the winding shaft." (Ex. S at p. 4, ll. 73 - 79.)

Regarding **claim 8**, Nagase discloses "wherein each actuating element comprises an actuating lever pivotably supported beside the winding shaft, each actuating lever having a free end that cooperates with the pullrod and being pivotable from a first position in which the actuating lever extends about parallel to the winding shaft into a second position in which the actuating lever is at about a right angle to the winding shaft." (Ex. S at p. 5, ll. 25 - 28.)

Regarding **claim 9**, Nagase satisfies "the guide elements comprise slide skirts." (Ex. S at p. 6, ll. 15 - 21.) One of ordinary skill in the art at the time of the invention

would have recognized that slide skids could be utilized instead of rollers if the lower friction provided by rollers would not be necessary. One of ordinary skill in this art would have known that slide skids are capable of guiding an element along a window. Indeed, slides would be less mechanically complex and cheaper to manufacture.

Regarding **claim 10**, Nagase discloses "wherein the guide elements comprise rotatable rollers." (Ex. S at p. 6, ll. 15 - 21.) In Nishiwaki, roller 4 and shaft 4a move to a first retracted position when pushed back in the elongated hole 5a. (Ex. E at Fig. 2.) This retracted-guide position function is well appreciated in the automotive industry, for example, for better aesthetics, for better contact over a changing distance between the roller attachment and the window (as in Nishiwaki), or to avoid catching upon objects placed in the hat deposit area of the automobile.

Regarding **claim 11**, Nishiwaki discloses "wherein each bearing arrangement includes a slide-block guide." (Ex. E at p.1, ll. 50 - 51.)

Regarding **claim 12**, Nishiwaki satisfies "the side-block guide has a curved guide slot for leading the guide element along a path." (Ex. E at p.1, ll. 50 - 51.) Nishiwaki discloses a straight guide slot. One of ordinary skill in the art at the time of the invention, however, would recognize that a curved guide slot would provide various benefits: for example, a curved guide slot could be utilized where a non-linear change in position or force was required, such as on a curved window.

Regarding **claim 13**, Nishiwaki satisfies "the guide slot is curved in a continuous form." (Ex. E at p.1, ll. 50 - 51.) Nishiwaki discloses a straight guide slot.

As discussed above in relation to claim 12, one of ordinary skill in the art at the time of the invention would recognize that a continuously curved guide slot would provide various benefits: for example, a curved guide slot could be utilized where a non-linear change in position or force was required, such as on a curved window.

Regarding **claim 14**, Nishiwaki discloses "wherein the guide slot has an L-shaped form." (Ex. E at p.1, ll. 50 - 51.) Nishiwaki discloses a straight guide slot. One of ordinary skill in the art at the time of the invention, however, would recognize that an L-shaped guide slot would provide various benefits over a straight guide slot. For example, an L-shaped guide slot could be utilized where a non-linear change in position or force was required, such as on a curved window.

Regarding **claim 15**, Nagase discloses "each bearing arrangement includes a bearing carrier which is pivotable about a bearing axis." (Ex. S at p. 4, ll. 69 - 72.)

Regarding **claim 16**, Nagase discloses "the bearing axis extends approximately parallel to a plane defined by the blind material in the reeled-out position." (Ex. S at p. 4, ll. 69 - 72.)

Regarding **claim 18**, Nishiwaki discloses "wherein each guide element has and [sic] associated pre-stressing device for pre-stressing the guide element toward the second guide position." (Ex. E at p. 1, ll. 11 - 14 and p. 1, l. 50 - p. 2, l. 5.)

Regarding **claim 19**, Nishiwaki discloses "wherein each bearing arrangement has an associated pre-stressing device for pre-stressing the guide element toward the second guide position." (Ex. E at p. 2, ll. 1 - 2.)

Regarding **claim 20**, Nishiwaki discloses "wherein the pre-stressing device includes a bending spring." (Ex. E at p. 1, ll. 11 - 14 and p. 1, l. 50 - p. 2, l. 5.)

Regarding **claim 21**, Nagase discloses "each guide element is movable along a path that curves about an axis is parallel to a longitudinal axis of the pullrod between the first retracted position and the second guide position." (Ex. S at p. 6, ll. 15 - 21.)

For at least these reasons, claims 1, 2, 5, 8 - 16, and 18 - 21 are unpatentable under 35 U.S.C. § 103(a) as being obvious over Nagase in view of Nishiwaki or Knowles or Burdick or Koike.

C. Claims 1, 2, 5, 8 - 16, and 18 - 21 are unpatentable under 35 U.S.C. § 103(a) as being obvious over Naruse et al. (JP Patent Publication No. H10-24734) (Ex. T), "Naruse", in view of Nishiwaki (Ex. E) or Knowles (Ex. F) or Burdick (Ex. G) or Koike (Ex. I).

Naruse relates to automotive window systems and substantially teaches the elements of the claims identified above. Naruse teaches every element of independent claim 1 except for the specific type of retracting guide. While Naruse has guide elements, they retract from a first extended position away from a hat deposit area of a vehicle to a second retracted position along the circumferential surface of the winding device (10) in a hat deposit area of a vehicle, not into the circumferential surface of the pull rod. (*See* Ex. T at Figs. 1 - 4.)

As described above in Section IV(A), Nishiwaki relates to the general knowledge within the automotive field regarding vibrations and dampening of vibrations relating to windows. Nishiwaki supplements Naruse and emphasizes the importance of using freely rotating rollers (or wheels) to guide and dampen vibration.

Furthermore, Knowles teaches retractable wheels to minimize size and prevent snagging of the wheels on other objects. Still further, Burdick teaches retractable guide wheels for an air cushion transporter that retract within a housing when not in use. Additionally, Koike teaches retractable guide wheels for automotive windows that retract in response to pressure. It would have been obvious to one of ordinary skill in the art at the time of the application to combine the retractable elements of Nishiwaki, Knowles, Burdick or Koike with the roller/stay combination of Naruse to create a system where the roller moved into and out of the circumferential surface of the stay.

These references are applied to the above-indicated claims in the attached claim chart demonstrating the obviousness of the claims. Claim construction is indicated in the attached claim chart. Where not specified, claims are construed according to their ordinary meaning. The following is a detailed analysis of the applicability of the cited references to the claims.

Regarding **claim 1**, Naruse discloses: (1) "[a] roll-up window blind for a window of a motor vehicle, the window having an associated window pane" (Ex. T at p. 2, ll. 46 - 47); (2) "a rotatable winding shaft" (Ex. T at p. 4, ll. 73 - 75); (3) "a blind material having parallel first and second edges with the first edge being connected to the winding shaft for movement between a reeled-in position and a reeled-out position" (Ex. T at p. 6, l. 15; p. 8, ll. 11 - 15 and Fig. 2); (4) "a first drive arrangement which pre-stresses the winding shaft in a direction corresponding to moving the blind

material to the reeled-in position" (Ex. T at p. 5, ll. 7 - 12); (5) "a pull rod fastened to the second edge of the blind material" (Ex. T at p. 6, ll. 63 - 65); and (6) "at least one deflection-resistant actuating element for transfer by an associated second drive arrangement between a first position in which the pullrod is disposed adjacent the winding shaft and a second position in which the pullrod is disposed relatively further away from the winding shaft" (Ex. T at p. 4, l. 82 - p. 5, l. 3).

Naruse does not disclose "two guide elements for guiding the pull rod on the window pane, the guide elements being disposed in spaced relation to each other and being supported on the pull rod by corresponding bearing arrangements for movement between a first retracted position and a second guide position, wherein in the first retracted position the guide elements are retracted with respect to a circumferential surface of the pull rod and in the second guide position the guide element project beyond the circumferential surface of the pull rod in order to guide the pull rod on the window pane as the blind material moves from the reeled-in position to the reeled-out position", *i.e.*, retractable guides. Naruse, however, does disclose roller guide elements for guiding the pull rod on the window pane as "a pair of rollers 28 which can roll on rear window at both ends of stay 5". (Ex. T at p. 5, ll. 48 - 49.) Furthermore, Naruse discloses that a portion of rollers (28) protrudes outside of the circumferential surface of stay (5). (Ex. T at Fig. 3.) These rollers are guide elements and they retract into the housing for guide rails (4) in the hat deposit area of the vehicle when not in use.

Nishiwaki cures any possible deficiency of Naruse. Nishiwaki discloses that "[s]aid roller 4 can freely rotate with its shaft 4a being installed in elongated hole 5a of holder 5 and at the same time, [and] its shaft can move in direction of vibration window glass 1, i.e., perpendicular to the plane of the window in said elongated hole 5a." (Ex. E at p. 1, ll. 50 - 52.) Thus, one of ordinary skill in the art would be motivated to use the technique of Nishiwaki to limit vibration. More importantly, the roller 4 and the shaft 4a, as seen in FIG. 2, demonstrate that multiple positions are encompassed. This includes a second guide position, as seen in FIG. 2. Furthermore, roller 4 and shaft 4a move to a first retracted position when pushed back in the elongated hole 5a. (Ex. E at Fig. 2.) This retracted-guide position function is well appreciated in the automotive industry, for example, for better aesthetics, for better contact over a changing distance between the roller attachment and the window (as in Nishiwaki), or to avoid catching upon objects placed in the hat deposit area of the automobile. Consequently, when roller 4 and shaft 4a are in a first retracted position, roller 4 is well within the circumferential surface of holder 5. (Ex. E at Fig. 2.)

As described above, the term "circumferential surface" is a broad term. When given its broadest reasonable interpretation, it means "of, at, or near the circumference; surrounding". (See Ex. H at p. 2) Therefore, the guide, wheels, and rollers of Nishiwaki, Knowles, Burdick, and Koike fully meet the claim element relating to "circumferential surface". It would have been obvious to one of ordinary skill in the art at the time of the application to combine the Nishiwaki moveable roller

with the roller/stay combination of Naruse to create a system where the roller moved into and out of the circumferential surface of the stay, especially since both Naruse and Nishiwaki relate to automotive window systems.

As described above in Section IV(A), a practitioner searching for a method of hiding or limiting the needed clearance for a guide or wheel would have been motivated to search out other collapsible wheels, such as those taught by Knowles, Burdick or Koike. A mechanical engineer would have looked to related fields, such as luggage design, airplane landing gear, shoe mounted wheels, etc. to find compact guides or supports that would minimize size, prevent snagging, or provide a more streamlined appearance. Therefore, claim 1 is obvious over the combination of references.

Regarding **claim 2**, Naruse discloses "wherein the winding shaft is supported in a housing having an outlet slot for the blind material." (Ex. T at p. 7, ll. 49 - 50.)

Regarding **claim 5**, Naruse discloses "wherein the first drive arrangement is a spring motor which is located inside the winding shaft." (Ex. T at p. 5, ll. 7 - 9.)

Regarding **claim 8**, Naruse discloses "wherein each actuating element comprises an actuating lever pivotably supported beside the winding shaft, each actuating lever having a free end that cooperates with the pullrod and being pivotable from a first position in which the actuating lever extends about parallel to the winding shaft into a second position in which the actuating lever is at about a right angle to the winding shaft." (Ex. T at p.4, l. 82 - p.5 l. 3.)

Regarding **claim 9**, Naruse satisfies "the guide elements comprise slide skids." (Ex. T at p. 5, ll. 48 - 49.) One of ordinary skill in the art at the time of the invention would have recognized that slide skids could be utilized instead of rollers if the lower friction provided by rollers would not be necessary. One of ordinary skill in this art would have known that slide skids are capable of guiding an element along a window. Indeed, slides would be less mechanically complex and cheaper to manufacture.

Regarding **claim 10**, Naruse discloses "wherein the guide elements comprise rotatable rollers." (Ex. T at p. 5, ll. 48 - 49.) In Nishiwaki, roller 4 and shaft 4a move to a first retracted position when pushed back in the elongated hole 5a. This retracted-guide position function is well appreciated in the automotive industry, for example, for better aesthetics, for better contact over a changing distance between the roller attachment and the window (as in Nishiwaki), or to avoid catching upon objects placed in the hat deposit area of the automobile.

Regarding **claim 11**, Nishiwaki discloses "wherein each bearing arrangement includes a slide-block guide." (Ex. E at p.1, ll. 50 - 51.)

Regarding **claim 12**, Nishiwaki satisfies "the side-block guide has a curved guide slot for leading the guide element along a path." Nishiwaki discloses a straight guide slot. (Ex. E at p.1, ll. 50 - 51.) One of ordinary skill in the art at the time of the invention would recognize that a curved guide slot would provide various benefits over a straight guide slot: for example, a curved guide slot could be utilized where a non-linear change in position or force was required, such as on a curved window.

Regarding **claim 13**, Nishiwaki satisfies "the guide slot is curved in a continuous form." Nishiwaki discloses a straight guide slot. (Ex. E at p.1, ll. 50 - 51.). As discussed above in relation to claim 12, one of ordinary skill in the art at the time of the invention would recognize that a continuously curved guide slot would provide various benefits: for example, a curved guide slot could be utilized where a non-linear change in position or force was required, such as on a curved window.

Regarding **claim 14**, Nishiwaki satisfies "the guide slot has an L-shaped form." (Ex. E at p.1, ll. 50 - 51.) Nishiwaki discloses a straight guide slot. One of ordinary skill in the art at the time of the invention, however, would recognize that an L-shaped guide slot would provide various benefits over a straight guide slot: for example, an L-shaped guide slot could be utilized where a non-linear change in position or force was required, such as on a curved window.

Regarding **claim 15**, Naruse discloses "each bearing arrangement includes a bearing carrier which is pivotable about a bearing axis." (Ex. T at p. 4, ll. 73 - 75.)

Regarding **claim 16**, Naruse discloses "the bearing axis extends approximately parallel to a plane defined by the blind material in the reeled-out position." (Ex. T at p. 4, ll. 73 - 75.)

Regarding **claim 18**, Nishiwaki discloses "wherein each guide element has and [sic] associated pre-stressing device for pre-stressing the guide element toward the second guide position." (Ex. E at p. 1, ll. 11 - 14 and p. 1, l. 50 - p. 2, l. 5.)

Regarding **claim 19**, Nishiwaki discloses "wherein each bearing arrangement has an associated pre-stressing device for pre-stressing the guide element toward the second guide position." (Ex. E at p. 2, ll. 1 - 2.)

Regarding **claim 20**, Nishiwaki discloses "wherein the pre-stressing device includes a bending spring." (Ex. E at p. 1, ll. 11 - 14 and p. 1, l. 50 - p. 2, l. 5.)

Regarding **claim 21**, Naruse discloses "wherein each guide element is movable along a path that curves about an axis is parallel to a longitudinal axis of the pullrod between the first retracted position and the second guide position." (Ex. T at p. 5, ll. 48 - 49.)

For at least these reasons, claims 1, 2, 5, 8 - 16, and 18 - 21 are unpatentable under 35 U.S.C. § 103(a) as being obvious over Naruse in view of Nishiwaki or Knowles or Burdick or Koike.

D. Claims 3, 4, 6 and 7 are unpatentable under 35 U.S.C. § 103(a) as being obvious over Ament (Ex. B) in view of Nishiwaki (Ex. E) or Knowles (Ex. F) or Burdick (Ex. G) and further in view of Zweigart et al. (DE Patent No. 4202081) (Ex. U), hereinafter "Zweigart".

Independent claim 1 is obvious under 35 USC 103(a) over Ament in view of Nishiwaki or Knowles or Burdick as described above. Ament, Nishiwaki, Knowles and Burdick apply to the above-identified claims as discussed above regarding claims 1, 5, 8 - 16 and 18 - 20. Dependent claims 3, 4, 6 and 7 depend directly or indirectly from independent claim 1.

Zweigart (Ex. U) is prior art in the automotive field and relates to window blinds for automobiles. Zweigart further supplements the combination of Ament,

Nishiwaki, Knowles and Burdick by teaching what was well within the purview of one of ordinary skill in the art. In particular, Zweigart addresses the recesses, slots and containment of said window blinds, for example. These references are applied to the above-indicated claims in the attached claim chart demonstrating the obviousness of the claims.

Both Ament and Zweigart are related to automotive window blind systems. One of ordinary skill in the art at the time of the invention would know to utilize the teachings of Zweigart in combination with the teachings of Ament to provide a recessed housing for storing a window blind. The following is a detailed analysis of the applicability of the cited references to the claims.

Regarding **claim 3**, Zweigart discloses "wherein the winding shaft is supported in a housing installed into a hat deposit area of the motor vehicle." (Ex. U at C. 1, ll. 22 - 23.)

Regarding **claim 4**, Zweigart discloses "an outlet slot for the blind material is contained in a hat deposit area of the motor vehicle." (Ex. U at Fig. 1.)

Regarding **claim 6**, Zweigart discloses "an outlet slot for the blind material and wherein the pullrod and the outlet slot have complementary shapes such that when the blind material is in the reel-in position the pullrod closes the outlet slot except for an annular gap surrounding the pullrod". (Ex. U at C. 2, ll. 16 - 21.) One of ordinary skill in the art at the time of the invention would have known to include an annular gap surrounding a pullrod. An annular gap would reduce the need for exact and

expensive machining of the outlet slot in the hat deposit area of the car to make a precise and tight fit. An annular gap may also provide for better clearance of the blind material through the outlet slot as the angle of the pullrod relative to the winding rod changes during extension of the pullrod.

Regarding **claim 7**, Zweigert discloses "an outlet slot for the blind material and wherein the pullrod and the outlet slot have complementary shapes such that when the blind material is in the reel-in position the pullrod closes the outlet slot". (Ex. U at C. 2, ll. 16 - 21.) One of ordinary skill in the art at the time of the invention would have known to provide a pullrod complementary to the outlet slot. A complementary pullrod would eliminate any gap surrounding the pullrod in the retracted position. This would prevent foreign objects from falling into the outlet slot and potentially damaging one or more elements of the retractable blind, such as the motor or guide elements. Furthermore, a complementary pullrod would improve aesthetics by fitting securely and reducing the total space for the outlet slot in the hat deposit area.

For at least these reasons, claims 3, 4, 6 and 7 are unpatentable under 35 U.S.C. § 103(a) as being obvious over Ament in view of Nishiwaki or Knowles or Burdick and further in view of Zweigart.

E. Claims 3, 4, 6 and 7 are unpatentable under 35 U.S.C. § 103(a) as being obvious over Nagase (Ex. S) in view of Nishiwaki (Ex. E) or Knowles (Ex. F) or Burdick (Ex. G) or Koike (Ex. I) and further in view of Zweigart (Ex. U).

Independent claim 1 is obvious under 35 USC 103(a) over Nagase in view of Nishiwaki or Knowles or Burdick or Koike as described above. Nagase, Nishiwaki,

Knowles, Burdick and Koike apply to the above-identified claims as discussed above regarding claims 1, 2, 5, 8 - 16 and 18 - 21. Dependent claims 3, 4, 6 and 7 depend directly or indirectly from independent claim 1.

Zweigart (Ex. U) is prior art relating to window blinds for automobiles. Zweigart supplements the combination of Nagase, Nishiwaki, Knowles, Burdick and Koike by teaching what was well within the purview of one of ordinary skill in the art. In particular, Zweigart addresses the recesses, slots and containment of said window blinds, for example. These references are applied to the above-indicated claims in the attached claim chart demonstrating the obviousness of the claims.

Both Nagase and Zweigart are related to automotive window blind systems. One of ordinary skill in the art at the time of the invention would know to utilize the teachings of Zweigart in combination with the teachings of Nagase to provide a recessed housing for storing a window blind. The following is a detailed analysis of the applicability of the cited references to the claims.

Regarding **claim 3**, Zweigart discloses "the winding shaft is supported in a housing installed into a hat deposit area of the motor vehicle." (Ex. U at C. 1, ll. 22 - 23.)

Regarding **claim 4**, Zweigart discloses "an outlet slot for the blind material is contained in a hat deposit area of the motor vehicle." (Ex. U at Fig. 1.)

Regarding **claim 6**, Zweigart discloses "an outlet slot for the blind material and wherein the pullrod and the outlet slot have complementary shapes such that when

the blind material is in the reel-in position the pullrod closes the outlet slot except for an annular gap surrounding the pullrod". (Ex. U at C. 2, ll. 16 - 21.) As indicated above in Section IV(D), one of ordinary skill in the art at the time of the invention would have known to include an annular gap surrounding a pullrod to reduce the need for exact and expensive machining of the outlet slot, and to provide for better clearance of the blind material through the outlet slot.

Regarding **claim 7**, Zweigert discloses "an outlet slot for the blind material and wherein the pullrod and the outlet slot have complementary shapes such that when the blind material is in the reel-in position the pullrod closes the outlet slot". (Ex. U at C. 2, ll. 16 - 21.) As indicated above in Section IV(D), one of ordinary skill in the art at the time of the invention would have known to provide a pullrod complementary to the outlet slot to prevent foreign objects from falling into the outlet slot and to improve aesthetics.

For at least these reasons, claims 3, 4, 6 and 7 are unpatentable under 35 U.S.C. § 103(a) as being obvious over Nagase in view of Nishiwaki or Knowles or Burdick or Koike and further in view of Zweigart.

F. Claims 3, 4, 6 and 7 are unpatentable under 35 U.S.C. § 103(a) as being obvious over Naruse (Ex. T) in view of Nishiwaki (Ex. E) or Knowles (Ex. F) or Burdick (Ex. G) or Koike (Ex. I) and further in view of Zweigart (Ex. U).

Independent claim 1 is obvious under 35 USC 103(a) over Naruse in view of Nishiwaki or Knowles or Burdick or Koike as described above. Naruse, Nishiwaki, Knowles, Burdick and Koike apply to the above-identified claims as discussed above

regarding claims 1, 2, 5, 8 - 16 and 18 - 21. Dependent claims 3, 4, 6 and 7 depend directly or indirectly from independent claim 1.

Zweigart (Ex. U) is prior art and relates to window blinds for automobiles. Zweigart further supplements the combination of Naruse, Nishiwaki, Knowles, Burdick and Koike by teaching what was well within the purview of one of ordinary skill in the art. In particular, Zweigart addresses the recesses, slots and containment of said window blinds and demonstrates the obviousness of the claims.

Both Naruse and Zweigart are related to automotive window blind systems. One of ordinary skill in the art at the time of the invention would know to utilize the teachings of Zweigart in combination with the teachings of Naruse to provide a recessed housing for storing a window blind. The following is a detailed analysis of the applicability of the cited references to the claims.

Regarding **claim 3**, Zweigart discloses "the winding shaft is supported in a housing installed into a hat deposit area of the motor vehicle." (Ex. U at C. 1, ll. 22 - 23.)

Regarding **claim 4**, Zweigart discloses "an outlet slot for the blind material is contained in a hat deposit area of the motor vehicle." (Ex. U at Fig. 1.)

Regarding **claim 6**, Zweigart discloses "an outlet slot for the blind material and wherein the pullrod and the outlet slot have complementary shapes such that when the blind material is in the reel-in position the pullrod closes the outlet slot except for an annular gap surrounding the pullrod". (Ex. U at C. 2, ll. 16 - 21.) As indicated

above in Section IV(D), one of ordinary skill in the art at the time of the invention would have known to include an annular gap surrounding a pullrod to reduce the need for exact and expensive machining of the outlet slot and to provide for better clearance of the blind material through the outlet slot.

Regarding **claim 7**, Zweigert discloses "an outlet slot for the blind material and wherein the pullrod and the outlet slot have complementary shapes such that when the blind material is in the reel-in position the pullrod closes the outlet slot". (Ex. U at C. 2, ll. 16 - 21.) As indicated above in Section IV(D), one of ordinary skill in the art at the time of the invention would have known to provide a pullrod complementary to the outlet slot to prevent foreign objects from falling into the outlet slot and to improve aesthetics.

For at least these reasons, claims 3, 4, 6 and 7 are unpatentable under 35 U.S.C. § 103(a) as being obvious over Naruse in view of Nishiwaki or Knowles or Burdick or Koike and further in view of Zweigart.

G. Claim 17 is unpatentable under 35 U.S.C. § 103(a) as being obvious over Ament (Ex. B) in view of Nishiwaki (Ex. E) or Knowles (Ex. F) or Burdick (Ex. G) and further in view of Blondin (FR Patent No. 614,687) (Ex. V), "Blondin".

Independent claim 1 is obvious under 35 USC 103(a) over Ament in view of Nishiwaki or Knowles or Burdick as described above. Ament, Nishiwaki, Knowles and Burdick apply to the above-identified claims as discussed above regarding claims 1, 2, 5, 8 - 16 and 18 - 21. Dependent claim 17 depends indirectly from independent claim 1.

Blondin (Ex. V) is prior art and relates to retractable wheels that would be considered by one of ordinary skill in the art at the time of the invention. As discussed above, one of ordinary skill in the art would be a mechanical engineer. Blondin further supplements the combination of Ament, Nishiwaki, Knowles and Burdick by teaching what was well within the purview of one of ordinary skill in the art. Blondin further supports the combination of Ament, Nishiwaki, Knowles and Burdick as relates to what was generally known regarding a wheel apparatus capable of extending at a right angle from a retracted position. In particular, Blondin addresses the rotation of wheels or rollers, for example. These references are applied to the above-indicated claims in the attached claim chart demonstrating the obviousness of the claims. The following is a detailed analysis of the applicability of the cited references to the claims.

Regarding **claim 17**, Blondin discloses "wherein the bearing axis extends at a right angle to the pullrod." (Ex. V at p. 2, ll. 49 - 52; Fig. 2.) The swing axis (7), (8) of the supports (9), (10) extends at a right angle to the lower edge (2) of the device. (Ex. V at Fig. 2.)

One of ordinary skill in the art at the time of the invention would have known to combine the wheel apparatus capable of extending at a right angle from a retracted position of Blondin to further support the combination of Ament and Nishiwaki or Knowles or Burdick. A bearing axis extending at a right angle to the pullrod would provide for additional motion of the guide element to adapt to various shaped

windows, including those windows curved in more than one direction. Furthermore, a bearing axis extending at a right angle to the pullrod would provide an alternative mechanism to retract a wheel within a housing.

For at least these reasons, claim 17 is unpatentable under 35 U.S.C. § 103(a) as being obvious over Ament in view of Nishiwaki or Knowles or Burdick and further in view of Blondin.

H. Claim 17 is unpatentable under 35 U.S.C. § 103(a) as being obvious over Nagase (Ex. S) in view of Nishiwaki (Ex. E) or Knowles (Ex. F) or Burdick (Ex. G) or Koike (Ex. I) and further in view of Blondin (Ex. V).

Independent claim 1 is obvious under 35 USC 103(a) over Nagase in view of Nishiwaki or Knowles or Burdick or Koike as described above. Nagase, Nishiwaki, Knowles, Burdick and Koike apply to the above-identified claims as discussed above regarding claims 1, 2, 5, 8 - 16 and 18 - 21. Dependent claim 17 depends indirectly from independent claim 1.

Blondin (Ex. V) is prior art and relates to retractable wheels that would be considered by one of ordinary skill in the art at the time of the invention. As discussed above, one of ordinary skill in the art would be a mechanical engineer. Blondin further supports the combination of Nagase, Nishiwaki, Knowles, Burdick and Koike as relates to what was generally known regarding a wheel apparatus capable of extending at a right angle from a retracted position. These references are applied to the above-indicated claims in the attached claim chart demonstrating the

obviousness of the claims. The following is a detailed analysis of the applicability of the cited references to the claims.

Regarding **claim 17**, Blondin discloses "the bearing axis extends at a right angle to the pullrod." (Ex. V at p. 2, ll. 49 - 52; Fig. 2.) The swing axis (7), (8) of the supports (9), (10) extends at a right angle to the lower edge (2) of the device. (Ex. V at Fig. 2.)

As indicated above in Section IV(G), one of ordinary skill in the art at the time of the invention would have known to combine the wheel apparatus capable of extending at a right angle from a retracted position of Blondin to provide for additional motion of the guide element to adapt to various shaped windows and as an alternative mechanism to retract a wheel within a housing.

For at least these reasons, claim 17 is unpatentable under 35 U.S.C. § 103(a) as being obvious over Nagase in view of Nishiwaki or Knowles or Burdick or Koike and further in view of Blondin.

I. Claim 17 is unpatentable under 35 U.S.C. § 103(a) as being obvious over Naruse (Ex. T) in view of Nishiwaki (Ex. E) or Knowles (Ex. F) or Burdick (Ex. G) or Koike (Ex. I) and further in view of Blondin (Ex. V).

Independent claim 1 is obvious under 35 USC 103(a) over Naruse in view of Nishiwaki or Knowles or Burdick or Koike as described above. Naruse, Nishiwaki, Knowles, Burdick and Koike apply to the above-identified claims as discussed above regarding claims 1, 2, 5, 8 - 16 and 18 - 21. Dependent claim 17 depends indirectly from independent claim 1.

Blondin (Ex. V) is prior art and relates to retractable wheels that would be considered by one of ordinary skill in the art at the time of the invention. As discussed above, one of ordinary skill in the art would be a mechanical engineer. Blondin further supports the combination of Naruse, Nishiwaki, Knowles, Burdick and Koike as relates to what was generally known regarding a wheel apparatus capable of extending at a right angle from a retracted position. These references are applied to the above-indicated claims in the attached claim chart demonstrating the obviousness of the claims. The following is a detailed analysis of the applicability of the cited references to the claims.

Regarding **claim 17**, Blondin discloses "wherein the bearing axis extends at a right angle to the pullrod." (Ex. V at p. 2, ll. 49 - 52; Fig. 2.) The swing axis (7), (8) of the supports (9), (10) extends at a right angle to the lower edge (2) of the device. (Ex. V at Fig. 2.) As indicated above in Section IV(G), one of ordinary skill in the art at the time of the invention would have known to combine the wheel apparatus capable of extending at a right angle from a retracted position of Blondin to provide for additional motion of the guide element to adapt to various shaped windows and as an alternative mechanism to retract a wheel within a housing.

Thus, Claim 17 is unpatentable under 35 U.S.C. § 103(a) as being obvious over Naruse in view of Nishiwaki, Knowles, Burdick, or Koike and in view of Blondin.

Conclusion

Petitioner respectfully requests cancellation of claims 1 - 21 in the '291 patent.

V. Payment of Fee

Petitioner further submits the required fee under 37 C.F.R. § 42.103. If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 50-2228, under Order No. 031347.0101, from which the undersigned is authorized to draw.

Dated: September 16, 2012

Respectfully submitted,

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Claim Chart for Inter Partes Review of U.S. Patent 6,422,291

A. Claims 1, 5, 8 - 16 and 18 - 20 are obvious under 35 USC 103(a) over Ament (Ex. B) in view of Nishiwaki (Ex. E) or Knowles (Ex. F) or Burdick (Ex. G).

Claim Language	Construction	Remarks
Claim 1. A roll-up window blind for a window of a motor vehicle, the window having an associated window pane, the roll-up blind comprising:	A roll-up blind for a window of a motor vehicle	Ament: "It is an object to provide a window shade, light- or sunscreen, or the like . . . for use in automotive vehicles." (Ex. B at C. 1, ll. 57 - 62.)
a rotatable winding shaft,	A rotatable winding shaft	Ament: "located in this groove is a tubular wind-up roller 8". (Ex. B at C. 3, ll. 27 - 28.)
a blind material having parallel first and second edges with the first edge being connected to the winding shaft for movement between a reeled-in position and a reeled-out position,	A blind material with parallel edges, a first edge connected to the winding shaft	See Ex. B at Figs. 2, 8, and 10; also at C. 3, ll. 16 - 28.
a first drive arrangement which pre-stresses the winding shaft in a direction corresponding to moving the blind material to the reeled-in position,	A first drive arrangement to pre-stress the winding shaft	"By means of this spring motor 12, the wind-up roller 8 is biased in the direction of winding-up the web 11 on the wind-up roller 8, so that if no external forces are engaging the end rail 9, the end rail is retained by the force of the spring motor 12 resting on the slot 10, because the web 11 is rolled up." (Ex. B at C. 3, ll. 41 - 47.)
a pull rod fastened to the second edge of the blind material,	A pull rod fastened to the second edge of the blind material	"On the outside of the wind-up roller 8, a shade or screen web 11 is secured with one edge, its opposite edge being mounted in an end rail 9 (see FIG. 1), which extends parallel to the longitudinal axis of the wind-up roller 8 in every operating position of the window shade 3." (Ex. B at C. 3, ll. 31 - 36.)
at least one deflection-resistant	At least one	Ament: "For extending the web 11 and keeping it spread open,

<p>actuating element for transfer by an associated second drive arrangement between a first position in which the pullrod is disposed adjacent the winding shaft and a second position in which the pullrod is disposed relatively further away from the winding shaft,</p>	<p>actuating elements moved by a second drive arrangement between a position adjacent the winding rod to a position distant from the winding rod</p>	<p>two two-armed lever elements 15 are pivotably journaled on the obliquely extending side wall 6, in the vicinity of the ends of the base 4." (Ex. B at C. 3, ll. 48 - 51 and Fig. 1.)</p>
<p>two guide elements for guiding the pull rod on the window pane, the guide elements being disposed in spaced relation to each other and being supported on the pull rod by corresponding bearing arrangements for movement between a first retracted position and a second guide position, wherein in the first retracted position the guide elements are retracted with respect to a circumferential surface of the pull rod and in the second guide position the guide element project beyond the circumferential surface of the pull rod in order to guide the pull rod on the window pane as the blind material moves</p>	<p>Two guide elements spaced apart and supported on the pull rod by bearing arrangements, where the guide elements move between a first position retracted within a circumferential surface of the pull rod and a second position at least partially beyond the circumferential</p>	<p>Ament: "to avoid vibration of the lever elements 15 and thus of the web 11 about an axis parallel to the wind-up roller 8 in the fully extended position of the web, two holding elements 53 are provided at the location occupied by the end rail 9 when the window shade 3 is fully extended, that is, preferably on the upper edge of the rear window 2; these holding elements 53 have the form shown in detail in FIG. 4." (Ex. B at C. 7, ll. 1 - 8.) It would have been obvious to substitute the retractable rollers of Nishiwaki (Ex. E at p. 1, ll. 50 - 52; FIG. 2), or the retractable wheels of Knowles (Ex. F at C. 2, ll. 11 - 16) or Burdick (Ex. G at C. 1, ll. 27 - 30) to reduce vibrations or accrue the benefits set forth in the petition. One of ordinary skill in the art would have been aware of retractable guides for various applications such as found in related fields, <i>see, e.g.</i>, USPN 2,183,105 (Ex. J at p. 1, C. 1, ll. 12 - 16 and p. 1, C. 2, l. 48 - p. 2, C. 1, l. 9); USPN 3,402,802 (Ex. K at C. 2, ll. 28 - 45); Chinese Patent Application No. CN19922034778U (Ex. L at p. 4, l. 50 - p. 5, l. 3 and Fig. 4); Great Britain Patent No. 424,204 (Ex. M at p. 2, ll. 85 - 102 and Fig. 2); USPN 2,779,049 (Ex. N at C. 3, ll. 28 - 40 and Figs. 11 - 13); USPN 3,705,731 (Ex. O at C. 3,</p>

<p>from the reeled-in position to the reeled-out position.</p>	<p>surface of the pull rod</p>	<p>Il. 45 - 63 and Fig. 2); USPN 5,119,872 (Ex. P at C. 2, Il. 38 - 44); USPN 2,196,946 (Ex. Q at p. 1, C. 2, Il. 43 - 47 and Figs. 2 - 3); USPN 3,057,636 (Ex. R at C. 1, Il. 33 - 38; C. 2, Il. 50 - 57).</p>
<p>Claim 5. A roll-up window blind according to claim 1, wherein the first drive arrangement is a spring motor which is located inside the winding shaft.</p>	<p>The first drive arrangement is a spring motor inside the winding shaft</p>	<p>Ament: "By means of this spring motor 12, the wind-up roller 8 is biased in the direction of winding-up the web 11 on the wind-up roller 8". (Ex. B at C. 3, Il. 41 - 47.)</p>
<p>Claim 8. A roll-up window blind according to claim 1, wherein each actuating element comprises an actuating lever pivotally supported beside the winding shaft, each actuating lever having a free end that cooperates with the pullrod and being pivotable from a first position in which the actuating lever extends about parallel to the winding shaft into a second position in which the actuating lever is at about a right angle to the winding shaft.</p>	<p>Each actuating element has a free end cooperating with pull rod, and pivots from parallel to the winding shaft to a position about at a ninety degree angle from the winding shaft</p>	<p>Ament: "For extending the web 11 and keeping it spread open, two two-armed lever elements 15 are pivotably journaled on the obliquely extending side wall 6, in the vicinity of the ends of the base 4." (Ex. B at C. 3, Il. 48 - 51 and Fig. 1.)</p>
<p>Claim 9. A roll-up window according to claim 1, wherein the guide elements comprise slide skids.</p>	<p>The guide elements include slide skids</p>	<p>"to avoid vibration of the lever elements 15 ...about an axis parallel to the wind-up roller 8 in the fully extended position of the web, two holding elements 53 are provided". (Ex. B at C. 7, Il. 1 - 8.) Holding elements 53 are slide skids.</p>
<p>Claim 10. A roll-up window blind according to claim 1, wherein the</p>	<p>The guide elements include</p>	<p>Nishiwaki: "roller (4) can freely rotate with its shaft 4a being installed in elongated hole (5a) of holder (5)". (Ex. E at p. 1, Il. 50</p>

<p>guide elements comprise rotatable rollers.</p>	<p>rotatable rollers.</p>	<p>- 51.)</p>
<p>Claim 11. A roll-up window blind according to claim 1, wherein each bearing arrangement includes a slide-block guide.</p>	<p>Each bearing arrangement includes a slide-block guide</p>	<p>Nishiwaki: "roller (4) can freely rotate with its shaft 4a being installed in elongated hole (5a) of holder (5)". (Ex. E at p. 1, ll. 50 - 51.)</p>
<p>Claim 12. A roll-up window blind according to claim 11, wherein the side-block guide has a curved guide slot for leading the guide element along a path.</p>	<p>The slide-block guide includes a curved guide slot</p>	<p>While Nishiwaki discloses a straight guide slot (Ex. E at p. 1, ll. 50 - 51), one of ordinary skill in the art would recognize that a curved guide slot would provide various benefits over a straight guide slot, e.g., a curved guide slot utilized where a non-linear change in position or force was required, such as on a curved window.</p>
<p>Claim 13. A roll-up window blind according to claim 12, wherein the guide slot is curved in a continuous form.</p>	<p>The guide slot is continuously curved</p>	<p>While Nishiwaki discloses a straight guide slot (Ex. E at p. 1, ll. 50 - 51), one of ordinary skill in the art would recognize that a continuously curved guide slot would provide various benefits over a straight guide slot, e.g., a curved guide slot for a non-linear change in position or force, such as for a curved window.</p>
<p>Claim 14. A roll-up window blind according to claim 12, wherein the guide slot has an L-shaped form.</p>	<p>The guide slot is L-shaped</p>	<p>While Nishiwaki discloses a straight guide slot (Ex. E at p. 1, ll. 50 - 51), one of ordinary skill in the art would recognize that an L-shaped guide slot would provide various benefits over a straight guide slot, e.g., an L-shaped guide slot could be utilized where a non-linear change in position or force was required, such as on a curved window.</p>
<p>Claim 15. A roll-up window blind according to claim 11, wherein each bearing arrangement includes a bearing carrier which is pivotable about a bearing axis.</p>	<p>The bearing arrangement includes a carrier pivotable around a bearing axis</p>	<p>Ament: "located in this groove is a tubular wind-up roller 8". (Ex. B at C. 3, ll. 26 - 27.)</p>
<p>Claim 16. A roll-up window blind according to claim 15,</p>	<p>The bearing axis is approximately</p>	<p>Ament: "located in this groove is a tubular wind-up roller 8". (Ex. B at C. 3, ll. 26 - 27.)</p>

characterized in that the bearing axis extends approximately parallel to a plane defined by the blind material in the reeled-out position.	parallel to plane of blind material in reeled-out position	
Claim 18. A roll-up window blind according to claim 1, wherein each guide element has and [sic] associated pre-stressing device for pre-stressing the guide element toward the second guide position.	Each guide element has an associated pre-stressing device	Nishiwaki: "roller can rotate and the shaft thereof can move into approximately perpendicular direction against to the plane of window glass by being inserted into and guided by an elongated hole, and a spring which presses said roller on one side of window glass". (Ex. E at p. 1, ll. 11 - 14; Ex. E at p. 1, l. 50 - p. 2, l. 5.)
Claim 19. A roll-up window blind according to claim 11, wherein each bearing arrangement has an associated pre-stressing device for pre-stressing the guide element toward the second guide position.	Each guide element has an associated pre-stressing device	Nishiwaki: "roller 4 is pressed and supported in the direction of being pressed inside window glass 1 by spring 6 one end of which is mounted on holder 5". (Ex. E at p. 2, ll. 1 - 2.)
Claim 20. A roll-up window blind according to claim 18, wherein the pre-stressing device includes a bending spring.	The pre-stressing device includes a bending spring	Nishiwaki: "roller can rotate and the shaft thereof can move into approximately perpendicular direction against to the plane of window glass by being inserted into and guided by an elongated hole, and a spring which presses said roller on one side of window glass". (Ex. E at p. 1, ll. 11 - 14; Ex. E at p. 1, l. 50 - p. 2, l. 5.)

B. Claims 1, 2, 5, 8 - 16 and 18 - 21 are obvious under 35 USC 103(a) over Nagase (Ex. S) in view of Nishiwaki (Ex. E) or Knowles (Ex. F) or Burdick (Ex. G) or Koike (Ex. I).

Claim Language	Construction	Remarks
Claim 1. A roll-up window blind for a window of a motor vehicle, the window having an associated	A roll-up blind for a window of a motor vehicle	Nagase: "car roll curtain device 10". (Ex. S at p. 4, l. 53.)

<p>window pane, the roll-up blind comprising:</p>		
<p>a rotatable winding shaft,</p>	<p>A rotatable winding shaft</p>	<p>Nagase: " rewinding shaft 20 ". (Ex. S at p. 4, ll. 69 - 72.)</p>
<p>a blind material having parallel first and second edges with the first edge being connected to the winding shaft for movement between a reeled-in position and a reeled-out position,</p>	<p>A blind material with parallel edges, a first edge connected to the winding shaft</p>	<p>Nagase: "This rewinding shaft 20 has one end of curtain sheet 18 attached to it and can roll up and pull down curtain sheet 18 by rotating rewinding shaft 20 in a predetermined direction." (Ex. S at p. 4, ll. 69 - 72.)</p>
<p>a first drive arrangement which pre-stresses the winding shaft in a direction corresponding to moving the blind material to the reeled-in position,</p>	<p>A first drive arrangement to pre-stress the winding shaft</p>	<p>Nagase: "Housed inside rewinding shaft 20 is spiral spring 22. This spiral spring 22 has one end fixed to rewinding shaft 20 and the other end to supporting members 24 that always bias rewinding shaft 20 in such direction as rolling up curtain sheet 18." (Ex. S at p. 4, ll. 73 - 79.)</p>
<p>a pull rod fastened to the second edge of the blind material,</p>	<p>A pull rod fastened to the second edge of the blind material</p>	<p>Nagase: "the other end of curtain sheet 18 that is rolled up in the said rewinding shaft 20 is fastened to guide member (60)". (Ex. S at p. 5, ll. 72 - 74.)</p>
<p>at least one deflection- resistant actuating element for transfer by an associated second drive arrangement between a first position in which the pullrod is disposed adjacent the winding shaft and a second position in which the pullrod is disposed relatively further away from the winding shaft,</p>	<p>At least one actuating elements moved by a second drive arrangement between a position adjacent the winding rod to a position distant from the</p>	<p>Nagase: "Actuator 26 has case 30. Housed inside case 30 is a motor (figures omitted) and output shaft 32 that rotates upon motor's drive power." (Ex. S at p. 5, ll. 1 - 4.) "This base end 46A of arm member 46 is integrally attached to output shaft 32 and allows arm member 46 to rotate when output shaft 32 rotates." (Ex. S at p. 5, ll. 25 - 28.)</p>

<p>two guide elements for guiding the pull rod on the window pane, the guide elements being disposed in spaced relation to each other and being supported on the pull rod by corresponding bearing arrangements for movement between a first retracted position and a second guide position, wherein in the first retracted position the guide elements are retracted with respect to a circumferential surface of the pull rod and in the second guide position the guide element project beyond the circumferential surface of the pull rod in order to guide the pull rod on the window pane as the blind material moves from the reeled-in position to the reeled-out position.</p>	<p>winding rod Two guide elements spaced apart and supported on the pull rod by bearing arrangements, where the guide elements move between a first position retracted within a circumferential surface of the pull rod and a second position at least partially beyond the circumferential surface of the pull rod</p>	<p>Nagase: Portion of rollers (68) protrudes outside of the circumferential surface of guide member (60). (Ex. S at Fig. 5.) "When guide member 60 is pushed up to a predetermined position and guide roller 68 comes into contact with rear window glass 14, guide member 60 moves in parallel with rear window glass 14 while guide roller 68 rotating along rear window glass 14". (Ex. S at p. 6, ll. 15 - 21.) It would have been obvious to substitute the retractable rollers of Nishiwaki (Ex. E at p. 1, ll. 50 - 52; FIG. 2), or the retractable wheels of Knowles (Ex. F at C. 2, ll. 11 - 16) or Burdick (Ex. G at C. 1, ll. 27 - 30) or Koike (Ex. I at C. 4, ll. 32 - 35) to reduce vibrations or accrue the benefits set forth in the petition. One of ordinary skill in the art would have been aware of retractable guides for various applications such as found in related fields, <i>see, e.g.</i>, USPN 2,183,105 (Ex. J at p. 1, C. 1, ll. 12 - 16; p. 1, C. 2, l. 48 - p. 2, C. 1, l. 9); USPN 3,402,802 (Ex. K at C. 2, ll. 28 - 45); Chinese Patent Application No. CN19922034778U (Ex. L at p. 4, l. 50 - p. 5, l. 3 and Fig. 4); Great Britain Patent No. 424,204 (Ex. M at p. 2, ll. 85 - 102 and Fig. 2); USPN 2,779,049 (Ex. N at C. 3, ll. 28 - 40 and Figs. 11 - 13); USPN 3,705,731 (Ex. O at C. 3, ll. 45 - 63 and Fig. 2); USPN 5,119,872 (Ex. P at C. 2, ll. 38 - 44); USPN 2,196,946 (Ex. Q at p. 1, C. 2, ll. 43 - 47 and Figs. 2 - 3); USPN 3,057,636 (Ex. R at C. 1, ll. 33 - 38; C. 2, ll. 50 - 57).</p>
<p>Claim 2. A roll-up window blind according to claim 1, wherein the winding shaft is supported in a housing having an outlet slot for the blind material.</p>	<p>The winding shaft is supported in a housing having an outlet slot for the blind material</p>	<p>Nagase: "Housed inside case 16 is rewinding shaft 20 to roll up curtain sheet 18." (Ex. S at p. 4, ll. 62 - 63 and Fig. 4.)</p>
<p>Claim 5. A roll-up window blind</p>	<p>The first drive</p>	<p>Nagase: "Housed inside rewinding shaft 20 is spiral spring 22.</p>

<p>according to claim 1, wherein the first drive arrangement is a spring motor which is located inside the winding shaft.</p>	<p>arrangement is a spring motor inside the winding shaft</p>	<p>This spiral spring 22 has one end fixed to rewinding shaft 20 and the other end to supporting members 24 that always bias rewinding shaft 20 in such direction as rolling up curtain sheet 18." (Ex. S at p. 4, ll. 73 - 79.)</p>
<p>Claim 8. A roll-up window blind according to claim 1, wherein each actuating element comprises an actuating lever pivotably supported beside the winding shaft, each actuating lever having a free end that cooperates with the pullrod and being pivotable from a first position in which the actuating lever extends about parallel to the winding shaft into a second position in which the actuating lever is at about a right angle to the winding shaft.</p>	<p>Each actuating element has a free end cooperating with pull rod, and pivots from parallel to the winding shaft to a position about at a ninety degree angle from the winding shaft</p>	<p>Nagase: "This base end 46A of arm member 46 is integrally attached to output shaft 32 and allows arm member 46 to rotate when output shaft 32 rotates." (Ex. S at p. 5, ll. 25 - 28.)</p>
<p>Claim 9. A roll-up window according to claim 1, wherein the guide elements comprise slide skids.</p>	<p>The guide elements include slide skids</p>	<p>Nagase: "When guide member 60 is pushed up to a predetermined position and guide roller 68 comes into contact with rear window glass 14, guide member 60 moves in parallel with rear window glass 14 while guide roller 68 rotating along rear window glass 14". (Ex. S at p. 6, ll. 15 - 21.)</p>
<p>Claim 10. A roll-up window blind according to claim 1, wherein the guide elements comprise rotatable rollers.</p>	<p>The guide elements include rotatable rollers.</p>	<p>Nagase: "When guide member 60 is pushed up to a predetermined position and guide roller 68 comes into contact with rear window glass 14, guide member 60 moves in parallel with rear window glass 14 while guide roller 68 rotating along rear window glass 14". (Ex. S at p. 6, ll. 15 - 21.)</p>
<p>Claim 11. A roll-up window blind</p>	<p>Each bearing</p>	<p>Nishiwaki: "roller (4) can freely rotate with its shaft 4a being</p>

according to claim 1, wherein each bearing arrangement includes a slide-block guide.	arrangement includes a slide-block guide	installed in elongated hole (5a) of holder (5)". (Ex. E at p.1, ll. 50 - 51.)
Claim 12. A roll-up window blind according to claim 11, wherein the side-block guide has a curved guide slot for leading the guide element along a path.	The slide-block guide includes a curved guide slot	While Nishiwaki discloses a straight guide slot (Ex. E at p. 1, ll. 50 - 51), one of ordinary skill in the art would recognize that a curved guide slot would provide various benefits over a straight guide slot, e.g., a curved guide slot where a non-linear change in position or force was required, such as on a curved window.
Claim 13. A roll-up window blind according to claim 12, wherein the guide slot is curved in a continuous form.	The guide slot is continuously curved	While Nishiwaki discloses a straight guide slot (Ex. E at p. 1, ll. 50 - 51), one of ordinary skill in the art would recognize that a continuously curved guide slot would provide various benefits over a straight guide slot, e.g., a curved guide slot for a non-linear change in position or force, such as for a curved window.
Claim 14. A roll-up window blind according to claim 12, wherein the guide slot has an L-shaped form.	The guide slot is L-shaped	While Nishiwaki discloses a straight guide slot (Ex. E at p. 1, ll. 50 - 51), one of ordinary skill in the art would recognize that an L-shaped guide slot would provide various benefits over a straight guide slot, e.g., an L-shaped guide slot for where a non-linear change in position or force was required, such as on a curved window.
Claim 15. A roll-up window blind according to claim 11, wherein each bearing arrangement includes a bearing carrier which is pivotable about a bearing axis.	The bearing arrangement includes a carrier pivotable around a bearing axis	Nagase: "This rewinding shaft 20 has one end of curtain sheet 18 attached to it and can roll up and pull down curtain sheet 18 by rotating rewinding shaft 20 in a predetermined direction." (Ex. S at p. 4, ll. 69 - 72.)
Claim 16. A roll-up window blind according to claim 15, characterized in that the bearing axis extends approximately parallel to a plane defined by the	The bearing axis is approximately parallel to plane of blind material in reeled-out	Nagase: "This rewinding shaft 20 has one end of curtain sheet 18 attached to it and can roll up and pull down curtain sheet 18 by rotating rewinding shaft 20 in a predetermined direction." (Ex. S at p. 4, ll. 69 - 72.)

blind material in the reeled-out position.	position	
<p>Claim 18. A roll-up window blind according to claim 1, wherein each guide element has and [sic] associated pre-stressing device for pre-stressing the guide element toward the second guide position.</p>	<p>Each guide element has an associated pre-stressing device</p>	<p>Nishiwaki: "the roller can rotate and the shaft thereof can move into approximately perpendicular direction against to the plane of window glass by being inserted into and guided by an elongated hole, and a spring which presses said roller on one side of window glass". (Ex. E at p. 1, ll. 11 - 14; <i>see also</i> Ex. E at p. 1, l. 50 - p. 2, l. 5.)</p>
<p>Claim 19. A roll-up window blind according to claim 11, wherein each bearing arrangement has an associated pre-stressing device for pre-stressing the guide element toward the second guide position.</p>	<p>Each guide element has an associated pre-stressing device</p>	<p>Nishiwaki: "roller 4 is pressed and supported in the direction of being pressed inside window glass 1 by spring 6 one end of which is mounted on holder 5". (Ex. E at p. 2, ll. 1 - 2.)</p>
<p>Claim 20. A roll-up window blind according to claim 18, wherein the pre-stressing device includes a bending spring.</p>	<p>The pre-stressing device includes a bending spring</p>	<p>Nishiwaki: "roller can rotate and the shaft thereof can move into approximately perpendicular direction against to the plane of window glass by being inserted into and guided by an elongated hole, and a spring which presses said roller on one side of window glass". (Ex. E at p. 1, ll. 11 - 14; Ex. E at p. 1, l. 50 - p. 2, l. 5.)</p>
<p>Claim 21. A roll-up window blind according to claim 1, wherein each guide element is movable along a path that curves about an axis is parallel to a longitudinal axis of the pullrod between the first retracted position and the second guide position.</p>	<p>Guide elements are moveable along a path that curves from parallel to a longitudinal axis of pull rod</p>	<p>Nagase: "When guide member 60 is pushed up to a predetermined position and guide roller 68 comes into contact with rear window glass 14, guide member 60 moves in parallel with rear window glass 14 while guide roller 68 rotating along rear window glass 14". (Ex. S at p. 6, ll. 15 - 21.)</p>

C. Claims 1, 2, 5, 8 - 16 and 18 - 21 are obvious under 35 U.S.C. § 103(a) over Naruse (Ex. T) in view of Nishiwaki (Ex. E) or Knowles (Ex. F) or Burdick (Ex. G) or Koike (Ex. D).

Claim Language	Construction	Remarks
<p>Claim 1. A roll-up window blind for a window of a motor vehicle, the window having an associated window pane, the roll-up blind comprising:</p>	<p>A roll-up blind for a window of a motor vehicle</p>	<p>Naruse: "This invention relates to electric curtain apparatus for vehicle". (Ex. T at p. 2, ll. 46 - 47.)</p>
<p>a rotatable winding shaft,</p>	<p>Rotatable winding shaft</p>	<p>Naruse: "winding device 3 which strains curtain 2 in the winding direction at all times". (Ex. T at p. 4, ll. 73 - 75.)</p>
<p>a blind material having parallel first and second edges with the first edge being connected to the winding shaft for movement between a reeled-in position and a reeled-out position,</p>	<p>Blind material with parallel edges, a first edge connected to the winding shaft</p>	<p>Naruse: "curtain 2 is wound up by winding device 3". (Ex. T at p. 6, l. 15 and Fig. 2.) "installation of winding device on guide rail which strains the curtain in the winding direction at all times allows curtain to be unrolled under strain at all times and to be orderly wound up in winding device". (Ex. T at p. 8, ll. 11 - 15.)</p>
<p>a first drive arrangement which pre-stresses the winding shaft in a direction corresponding to moving the blind material to the reeled-in position,</p>	<p>A first drive arrangement to pre-stress the winding shaft</p>	<p>Naruse: "Winding axis is energised by rotating force generated by which is integrated into winding axis. Base end part of curtain 2 is fixed on this winding axis. Due to these arrangements the curtain 2 is strained in the winding direction at all times." (Ex. T at p. 5, ll. 7 - 12.)</p>
<p>a pull rod fastened to the second edge of the blind material,</p>	<p>A pull rod fastened to the second edge of the blind material</p>	<p>Naruse: "stay 5A which is installed in parallel with the guide rail 4 on which the end of the curtain 2A is fixed". (Ex. T at p. 6, ll. 63 - 65.)</p>
<p>at least one deflection- resistant actuating element for transfer by an associated second drive arrangement between a first</p>	<p>At least one actuating elements moved by a second drive</p>	<p>Naruse: "a pair of arms 7 in which one end of each one is rotatably connected with corresponding ends of stay (5) rotatably, respectively, and other end of the arms is connected with a pair of sliders (6) rotatably, respectively, electric drive mechanism (8)</p>

<p>position in which the pullrod is disposed adjacent the winding shaft and a second position in which the pullrod is disposed relatively further away from the winding shaft,</p>	<p>arrangement between a position adjacent the winding rod to a position distant from the winding rod</p>	<p>which lifts and lowers stay (5) by a pair of arms (7) with a pair of sliders (6) which is moved in synchronisation with the direction of moving away and approaching mutually, and a pair of energising mechanism (9) which energises a pair of arms (7) into the position at which these arms cross with stay (5) at right angle". (Ex. T at p. 4, l. 82 - p. 5, l. 3.)</p>
<p>two guide elements for guiding the pull rod on the window pane, the guide elements being disposed in spaced relation to each other and being supported on the pull rod by corresponding bearing arrangements for movement between a first retracted position and a second guide position, wherein in the first retracted position the guide elements are retracted with respect to a circumferential surface of the pull rod and in the second guide position the guide element project beyond the circumferential surface of the pull rod in order to guide the pull rod on the window pane as the blind material moves from the reeled-in position to the reeled-out position.</p>	<p>Two guide elements spaced apart and supported on the pull rod by bearing arrangements, where the guide elements move between a first position retracted within a circumferential surface of the pull rod and a second position at least partially beyond the circumferential surface of the pull rod</p>	<p>Naruse: "a pair of rollers 28 which can roll on rear window at both ends of stay 5". (Ex. T at p. 5, ll. 48 - 49.) Portion of rollers (28) protrudes outside of the circumferential surface of stay (5). (Ex. T at Fig. 3.) It would have been obvious to substitute the retractable rollers of Nishiwaki (Ex. E at p. 1, ll. 50 - 52; FIG. 2), or the retractable wheels of Knowles (Ex. F at C. 2, ll. 11 - 16) or Burdick (Ex. G at C. 1, ll. 27 - 30) or Koike (Ex. I at C. 4, ll. 32 - 35) to reduce vibrations or accrue the benefits set forth in the petition. One of ordinary skill in the art at the time of the invention would have been aware of retractable guides for various applications such as found in related fields, <i>see, e.g.</i>, USPN 2,183,105 (Ex. J at p. 1, C. 1, ll. 12 - 16 and p. 1, C. 2, l. 48 - p. 2, C. 1, l. 9); USPN 3,402,802 (Ex. K at C. 2, ll. 28 - 45); Chinese Patent Application No. CN19922034778U (Ex. L at p. 4, l. 50 - p. 5, l. 3 and Fig. 4); Great Britain Patent No. 424,204 (Ex. M at p. 2, ll. 85 - 102 and Fig. 2); USPN 2,779,049 (Ex. N at C. 3, ll. 28 - 40 and Figs. 11 - 13); USPN 3,705,731 (Ex. O at C. 3, ll. 45 - 63 and Fig. 2); USPN 5,119,872 (Ex. P at C. 2, ll. 38 - 44); USPN 2,196,946 (Ex. Q at p. 1, C. 2, ll. 43 - 47 and Figs. 2 - 3); USPN 3,057,636 (Ex. R at C. 1, ll. 33 - 38 and C. 2, ll. 50 - 57) as well as other references.</p>
<p>Claim 2. A roll-up window blind</p>	<p>The winding shaft</p>	<p>Naruse: "Electric curtain apparatus 1, 1A, was applied to rear</p>

<p>according to claim 1, wherein the winding shaft is supported in a housing having an outlet slot for the blind material.</p>	<p>is supported in a housing having an outlet slot for the blind material</p>	<p>windows". (Ex. T at p. 7, ll. 45 - 46.)</p>
<p>Claim 5. A roll-up window blind according to claim 1, wherein the first drive arrangement is a spring motor which is located inside the winding shaft.</p>	<p>The first drive arrangement is a spring motor inside the winding shaft</p>	<p>Naruse: "Winding axis is energised by rotating force generated by coil spring which is integrated into winding axis". (Ex. T at p. 5, ll. 7 - 9.)</p>
<p>Claim 8. A roll-up window blind according to claim 1, wherein each actuating element comprises an actuating lever pivotably supported beside the winding shaft, each actuating lever having a free end that cooperates with the pullrod and being pivotable from a first position in which the actuating lever extends about parallel to the winding shaft into a second position in which the actuating lever is at about a right angle to the winding shaft.</p>	<p>Each actuating element has a free end cooperating with pull rod, and pivots from parallel to the winding shaft to a position about at a ninety degree angle from the winding shaft</p>	<p>Naruse: "a pair of arms (7) in which one end of each one is rotatably connected with corresponding ends of stay (5) rotatably, respectively, and other end of the arms is connected with a pair of sliders (6) rotatably, respectively, electric drive mechanism (8) which lifts and lowers stay (5) by a pair of arms (7) with a pair of sliders (6) which is moved in synchronisation with the direction of moving away and approaching mutually, and a pair of energising mechanism (9) which energises a pair of arms (7) into the position at which these arms cross with stay (5) at right angle." (Ex. T at p. 4, l. 82 - p.5 l. 3.)</p>
<p>Claim 9. A roll-up window according to claim 1, wherein the guide elements comprise slide skids.</p>	<p>The guide elements include slide skids</p>	<p>Naruse: "a pair of rollers 28 which can roll on rear window at both ends of stay 5". (Ex. T at p. 5, ll. 48 - 49.)</p>
<p>Claim 10. A roll-up window blind according to claim 1, wherein the</p>	<p>The guide elements include</p>	<p>Naruse: "a pair of rollers 28 which can roll on rear window at both ends of stay 5". (Ex. T at p. 5, ll. 48 - 49.)</p>

guide elements comprise rotatable rollers.	rotatable rollers.	
Claim 11. A roll-up window blind according to claim 1, wherein each bearing arrangement includes a slide-block guide.	Each bearing arrangement includes a slide-block guide	Nishiwaki: "roller (4) can freely rotate with its shaft 4a being installed in elongated hole (5a) of holder (5)". (Ex. E at p.1, ll. 50 - 51.)
Claim 12. A roll-up window blind according to claim 11, wherein the side-block guide has a curved guide slot for leading the guide element along a path.	The slide-block guide includes a curved guide slot	While Nishiwaki discloses a straight guide slot (Ex. E at p. 1, ll. 50 - 51), one of ordinary skill in the art would recognize that a curved guide slot would provide various benefits over a straight guide slot, e.g., a curved guide slot for where a non-linear change in position or force was required, such as on a curved window.
Claim 13. A roll-up window blind according to claim 12, wherein the guide slot is curved in a continuous form.	The guide slot is continuously curved	While Nishiwaki discloses a straight guide slot (Ex. E at p. 1, ll. 50 - 51), one of ordinary skill in the art would recognize that a continuously curved guide slot would provide various benefits over a straight guide slot, e.g., a curved guide slot for a non-linear change in position or force, such as for a curved window.
Claim 14. A roll-up window blind according to claim 12, wherein the guide slot has an L-shaped form.	The guide slot is L-shaped	While Nishiwaki discloses a straight guide slot (Ex. E at p. 1, ll. 50 - 51), one of ordinary skill in the art would recognize that an L-shaped guide slot would provide various benefits over a straight guide slot, e.g., an L-shaped guide slot where a non-linear change in position or force was required, such as on a curved window.
Claim 15. A roll-up window blind according to claim 11, wherein each bearing arrangement includes a bearing carrier which is pivotable about a bearing axis.	The bearing arrangement includes a carrier pivotable around a bearing axis	Naruse: "winding device 3 which strains curtain 2 in the winding direction at all times". (Ex. T at p. 4, ll. 73 - 75.)
Claim 16. A roll-up window blind according to claim 15, characterized in that the bearing	The bearing axis is approximately parallel to plane	Naruse: "winding device 3 which strains curtain 2 in the winding direction at all times". (Ex. T at p. 4, ll. 73 - 75.)

<p>axis extends approximately parallel to a plane defined by the blind material in the reeled-out position.</p>	<p>of blind material in reeled-out position</p>	
<p>Claim 18. A roll-up window blind according to claim 1, wherein each guide element has and [sic] associated pre-stressing device for pre-stressing the guide element toward the second guide position.</p>	<p>Each guide element has an associated pre-stressing device</p>	<p>Nishiwaki: "the roller can rotate and the shaft thereof can move into approximately perpendicular direction against to the plane of window glass by being inserted into and guided by an elongated hole, and a spring which presses said roller on one side of window glass". (Ex. E at p. 1, ll. 11 - 14; <i>see also</i> Ex. E at p. 1, l. 50 - p. 2, l. 5.)</p>
<p>Claim 19. A roll-up window blind according to claim 11, wherein each bearing arrangement has an associated pre-stressing device for pre-stressing the guide element toward the second guide position.</p>	<p>Each guide element has an associated pre-stressing device</p>	<p>Nishiwaki: "roller 4 is pressed and supported in the direction of being inside window glass 1 by spring 6 one end of which is mounted on holder 5". (Ex. E at p. 2, ll. 1 - 2.)</p>
<p>Claim 20. A roll-up window blind according to claim 18, wherein the pre-stressing device includes a bending spring.</p>	<p>The pre-stressing device includes a bending spring</p>	<p>Nishiwaki: "roller can rotate and the shaft thereof can move into approximately perpendicular direction against to the plane of window glass by being inserted into and guided by an elongated hole, and a spring which presses said roller on one side of window glass". (Ex. E at p. 1, ll. 11 - 14; Ex. E at p. 1, l. 50 - p. 2, l. 5.)</p>
<p>Claim 21. A roll-up window blind according to claim 1, wherein each guide element is movable along a path that curves about an axis is parallel to a longitudinal axis of the pullrod between the first retracted position and the second guide position.</p>	<p>Guide elements are moveable along a path that curves from parallel to a longitudinal axis of pull rod</p>	<p>Naruse: "a pair of rollers 28 which can roll on rear window at both ends of stay 5". (Ex. T at p. 5, ll. 48 - 49.)</p>

D. Claims 3, 4, 6, and 7 are obvious under 35 USC 103(a) over Ament (Ex. B) in view of Nishiwaki (Ex. E) or Knowles (Ex. F) or Burdick (Ex. G) and further in view of Zweigart (Ex. U).

Claim Language	Construction	Remarks
<p>Claim 3. A roll-up window blind according to claim 1, wherein the winding shaft is supported in a housing installed into a hat deposit area of the motor vehicle.</p>	<p>Winding shaft is in a housing in a hat deposit area</p>	<p>Both Ament and Zweigart are related to automotive systems. Zweigart: "the winding rod and the pressure bars are located in a recess beneath the level of the hat rack." (Ex. U at C. 1, ll. 22 - 23.)</p>
<p>Claim 4. A roll-up window blind according to claim 3, characterized in that an outlet slot for the blind material is contained in a hat deposit area of the motor vehicle.</p>	<p>Outlet slot is in a hat deposit area</p>	<p>Zweigart: Outlet slot for the blind material is contained in the hat rack (11) area. (Ex. U at Fig. 1.)</p>
<p>Claim 6. A roll-up window blind according to claim 1, further including an outlet slot for the blind material and wherein the pullrod and the outlet slot have complementary shapes such that when the blind material is in the reel-in position the pullrod closes the outlet slot except for an annular gap</p>	<p>Outlet slot where an annular gap surrounds pull rod in a pulled-in position.</p>	<p>Zweigart: "the roller blinds subjected to spring preloading withdraw from the winding spindle, are characterized by the fact that the arrangement under the hat rack (11) is installed lower and is completely covered in the idle position by a flap (1) held in the closed position by spring preloading, which can be forcibly opened and closed by the end profile (2)." (Ex. U at C. 2, ll. 16 - 21.) One of ordinary skill in the art at the time of the invention would have known to include an annular gap surrounding a pullrod to reduce the need for exact and expensive machining of the outlet slot, or for better clearance of the blind material through the outlet slot as the angle of the pullrod relative to the winding rod changes during extension of the pullrod.</p>

<p>surrounding the pullrod. Claim 7. A roll-up window blind according to claim 1, further including an outlet slot for the blind material and wherein the pullrod and the outlet slot have complementary shapes such that when the blind material is in the reel-in position the pullrod closes the outlet slot.</p>	<p>Outlet slot where the pull rod covers the outlet slot in a pulled-in position.</p>	<p>Zweigart: "the roller blinds subjected to spring preloading withdraw from the winding spindle, are characterized by the fact that the arrangement under the hat rack (11) is installed lower and is completely covered in the idle position by a flap (1) held in the closed position by spring preloading, which can be forcibly opened and closed by the end profile (2)." (Ex. U at C. 2, ll. 16 - 21.) One of ordinary skill in the art would have known to provide a pullrod complementary to the outlet slot to prevent foreign objects from falling into the outlet slot and potentially damaging one or more elements of the retractable blind, such as the motor or guide elements, or to improve aesthetics by fitting securely and reducing the total space for the outlet slot in the hat deposit area.</p>
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E. Claims 3, 4, 6 and 7 are obvious under 35 USC 103(a) over Nagase (Ex. S) in view of Nishiwaki (Ex. E) or Knowles (Ex. F) or Burdick (Ex. G) or Koike (Ex. I) and further in view of Zweigart (Ex. U).

Claim Language	Construction	Remarks
<p>Claim 3. A roll-up window blind according to claim 1, wherein the winding shaft is supported in a housing installed into a hat deposit area of the motor vehicle.</p>	<p>Winding shaft is in a housing in a hat deposit area</p>	<p>Both Nagase and Zweigart are related to automotive systems. Zweigart: "the winding rod and the pressure bars are located in a recess beneath the level of the hat rack." (Ex. U at C. 1, ll. 22 - 23.)</p>
<p>Claim 4. A roll-up window blind according to claim 3, characterized in that an outlet slot for the blind material is contained in a hat deposit area of the motor vehicle.</p>	<p>Outlet slot is in a hat deposit area</p>	<p>Zweigart: Outlet slot for the blind material is contained in the hat rack (11) area. (Ex. U at Fig. 1.)</p>

<p>Claim 6. A roll-up window blind according to claim 1, further including an outlet slot for the blind material and wherein the pullrod and the outlet slot have complementary shapes such that when the blind material is in the reel-in position the pullrod closes the outlet slot except for an annular gap surrounding the pullrod.</p>	<p>Outlet slot where an annular gap surrounds pull rod in a pulled-in position.</p>	<p>Zweigart: "the roller blinds subjected to spring preloading withdraw from the winding spindle, are characterized by the fact that the arrangement under the hat rack (11) is installed lower and is completely covered in the idle position by a flap (1) held in the closed position by spring preloading, which can be forcibly opened and closed by the end profile (2)." (Ex. U at C. 2, ll. 16 - 21.) One of ordinary skill in the art at the time of the invention would have known to include an annular gap surrounding a pullrod to reduce the need for exact and expensive machining of the outlet slot, or for better clearance of the blind material through the outlet slot as the angle of the pullrod relative to the winding rod changes during extension of the pullrod.</p>
<p>Claim 7. A roll-up window blind according to claim 1, further including an outlet slot for the blind material and wherein the pullrod and the outlet slot have complementary shapes such that when the blind material is in the reel-in position the pullrod closes the outlet slot.</p>	<p>Outlet slot where the pull rod covers the outlet slot in a pulled-in position.</p>	<p>Zweigart: "the roller blinds subjected to spring preloading withdraw from the winding spindle, are characterized by the fact that the arrangement under the hat rack (11) is installed lower and is completely covered in the idle position by a flap (1) held in the closed position by spring preloading, which can be forcibly opened and closed by the end profile (2)." (Ex. U at C. 2, ll. 16 - 21.) One of ordinary skill in the art would have known to provide a pullrod complementary to the outlet slot to prevent foreign objects from falling into the outlet slot and potentially damaging one or more elements of the retractable blind, such as the motor or guide elements, or to improve aesthetics by fitting securely and reducing the total space for the outlet slot in the hat deposit area.</p>

F. Claims 3, 4, 6 and 7 are obvious under 35 USC 103(a) over Naruse (Ex. T) in view of Nishiwaki (Ex. E) or Knowles (Ex. F) or Burdick (Ex. G) or Koike (Ex. I) and further in view of Zweigart (Ex. U).

Claim Language	Construction	Remarks
<p>Claim 3. A roll-up window</p>	<p>Winding shaft</p>	<p>Both Naruse and Zweigart are related to automotive systems.</p>

<p>blind according to claim 1, wherein the winding shaft is supported in a housing installed into a hat deposit area of the motor vehicle.</p>	<p>is in a housing in a hat deposit area</p>	<p>Naruse: "Electric curtain apparatus 1, 1A, was applied to rear windows". (Ex. T at p. 7, ll. 45 - 46.) Zweigart: "the winding rod and the pressure bars are located in a recess beneath the level of the hat rack." (Ex. U at C. 1, ll. 22 - 23.)</p>
<p>Claim 4. A roll-up window blind according to claim 3, characterized in that an outlet slot for the blind material is contained in a hat deposit area of the motor vehicle.</p>	<p>Outlet slot is in a hat deposit area</p>	<p>Naruse: "Electric curtain apparatus 1, 1A, was applied to rear windows". (Ex. T at p. 7, ll. 45 - 46.) Zweigart: Outlet slot for the blind material is contained in the hat rack (11) area. (Ex. U at Fig. 1.)</p>
<p>Claim 6. A roll-up window blind according to claim 1, further including an outlet slot for the blind material and wherein the pullrod and the outlet slot have complementary shapes such that when the blind material is in the reel-in position the pullrod closes the outlet slot except for an annular gap surrounding the pullrod.</p>	<p>Outlet slot where an annular gap surrounds pull rod in a pulled-in position.</p>	<p>Zweigart: "the roller blinds subjected to spring preloading withdraw from the winding spindle, are characterized by the fact that the arrangement under the hat rack (11) is installed lower and is completely covered in the idle position by a flap (1) held in the closed position by spring preloading, which can be forcibly opened and closed by the end profile (2)." (Ex. U at C. 2, ll. 16 - 21.) One of ordinary skill in the art at the time of the invention would have known to include an annular gap surrounding a pullrod to reduce the need for exact and expensive machining of the outlet slot, or for better clearance of the blind material through the outlet slot as the angle of the pullrod relative to the winding rod changes during extension of the pullrod.</p>
<p>Claim 7. A roll-up window blind according to claim 1, further including an outlet slot for the blind material</p>	<p>Outlet slot where the pull rod covers the outlet slot in a</p>	<p>Zweigart: "the roller blinds subjected to spring preloading withdraw from the winding spindle, are characterized by the fact that the arrangement under the hat rack (11) is installed lower and is completely covered in the idle position by a flap (1) held in the closed position by</p>

<p>and wherein the pullrod and the outlet slot have complementary shapes such that when the blind material is in the reel-in position the pullrod closes the outlet slot.</p>	<p>pulled-in position.</p>	<p>spring preloading, which can be forcibly opened and closed by the end profile (2)." (Ex. U at C. 2, ll. 16 - 21.) One of ordinary skill in the art at the time of the invention would have known to include an annular gap surrounding a pullrod to reduce the need for exact and expensive machining of the outlet slot, or for better clearance of the blind material through the outlet slot as the angle of the pullrod relative to the winding rod changes during extension of the pullrod.</p>
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G. Claim 17 is obvious under 35 USC 103(a) over Ament (Ex. B) in view of Nishiwaki (Ex. E) or Knowles (Ex. F) or Burdick (Ex. G) and further in view of Blondin (Ex. V).

Claim	Construction	Remarks
<p>Claim 17. A roll-up window blind according to claim 15, wherein the bearing axis extends at a right angle to the pullrod.</p>	<p>Bearing axis is perpendicular to pull rod</p>	<p>Both Ament and Blondin are related to automotive systems. Blondin: "the platform 1, which has been shown upside-down for greater clarity, has two axes (7), (8) around which the supports (9), (10), which bear the axes of the small wheels (11), (12), can swing." (Ex. V at p. 2, ll. 49 - 52; Fig. 2.) The swing axis (7), (8) of the supports (9), (10) extends at a right angle to the lower edge (2) of the suitcase. One of ordinary skill in the art would have known to combine the wheel apparatus capable of extending at a right angle from a retracted position of Blondin to provide for additional motion of the guide element to adapt to various shaped windows, including windows curved in more than one direction, or as an alternative mechanism to retract a wheel within a housing.</p>

H. Claim 17 is obvious under 35 USC 103(a) over Nagase (Ex. S) in view of Nishiwaki (Ex. E) or Knowles (Ex. F) or Burdick (Ex. G) or Koike (Ex. J) and further in view of Blondin (Ex. V).

Claim	Construction	Remarks
<p>Claim 17. A roll-up window blind according to</p>	<p>Bearing axis is perpendicular to pull rod</p>	<p>Blondin: "the platform 1, which has been shown upside-down for greater clarity, has two axes (7), (8) around which the supports (9), (10), which bear the axes of the small wheels (11), (12), can swing." (Ex. V at p. 2, ll. 49 - 52; Fig. 2.) The swing axis (7), (8) of the supports (9), (10) extends at a right angle to the lower edge (2) of the</p>

<p>claim 15, wherein the bearing axis extends at a right angle to the pullrod.</p>		<p>suitcase. One of ordinary skill in the art at the time of the invention would have known to combine the wheel apparatus capable of extending at a right angle from a retracted position of Blondin to provide for additional motion of the guide element to adapt to various shaped windows, including those windows curved in more than one direction, or as an alternative mechanism to retract a wheel within a housing.</p>
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I. Claim 17 is obvious under 35 USC 103(a) over Naruse (Ex. T) in view of Nishiwaki (Ex. E) or Knowles (Ex. F) or Burdick (Ex. G) or Koike (Ex. J) and further in view of Blondin (Ex. V).

Claim	Construction	Remarks
<p>Claim 17. A roll-up window blind according to claim 15, wherein the bearing axis extends at a right angle to the pullrod.</p>	<p>Bearing axis is perpendicular to pull rod</p>	<p>Blondin: "the platform 1, which has been shown upside-down for greater clarity, has two axes (7), (8) around which the supports (9), (10), which bear the axes of the small wheels (11), (12), can swing." (Ex. V at p. 2, ll. 49 - 52; Fig. 2.) The swing axis (7), (8) of the supports (9), (10) extends at a right angle to the lower edge (2) of the suitcase. One of ordinary skill in the art at the time of the invention would have known to combine the wheel apparatus capable of extending at a right angle from a retracted position of Blondin to provide for additional motion of the guide element to adapt to various shaped windows, including those windows curved in more than one direction, or as an alternative mechanism to retract a wheel within a housing.</p>

APPENDIX OF EXHIBITS

- Ex. A: U.S. Patent No. 6,422,291 to Brunnert et al.
- Ex. B: U.S. Patent No. 4,836,263 to Ament.
- Ex. C: Declaration of Gerald Zimmermann from prosecution history of U.S. Patent No. 4,836,263.
- Ex. D: Declaration of Timothy M. Hicks from prosecution history of U.S. Patent No. 4,836,263.
- Ex. E: Japanese Utility Model S54-144521 to Nishiwaki, English translation thereof, and certificate of translation.
- Ex. F: U.S. Patent No. 4,254,850 to Knowles.
- Ex. G: U.S. Patent No. 3,829,116 to Burdick.
- Ex. H: Dictionary Definition of "circumferential", last accessed September 7, 2012, <http://dictionary.reference.com/browse/circumferential>.
- Ex. I: JP Publication of Patent Application S58-20515 to Koike, English translation thereof, and certificate of translation.
- Ex. J: U.S. Patent No. 2,183,105.
- Ex. K: U.S. Patent No. 3,402,802.
- Ex. L: Chinese Patent Application No. CN19922034778U, English translation thereof, and certificate of translation.
- Ex. M: Great Britain Patent No. 424,204.
- Ex. N: U.S. Patent No. 2,779,049.

- Ex. O: U.S. Patent No. 3,705,731.
- Ex. P: U.S. Patent No. 5,119,872.
- Ex. Q: U.S. Patent No. 2,196,946.
- Ex. R: U.S. Patent No. 3,057,636.
- Ex. S: JP Patent Publication No. H9-207565 to Nagase, English translation thereof, and certificate of translation.
- Ex. T: JP Patent Publication No. H10-24734 to Naruse, English translation thereof, and certificate of translation.
- Ex. U: DE Patent No. 4202081 to Zweigart et al., English translation thereof, and certificate of translation.
- Ex. V: FR Patent No. 614,687 to Blondin, English translation thereof, and certificate of translation.

CERTIFICATE OF SERVICE

I hereby certify that on this 16th day of September, 2012, a copy of the Request for *Inter Partes* Review and supporting materials were sent via FedEx, to the following:

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