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Jerome R. Drouillard 10213 Tims Lake Blvd. Grass Lake, MI 49240			MORGAN, EMILY M	
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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 11/465,498  
Filing Date: August 18, 2006  
Appellant(s): NICHOLS ET AL.

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Jerome Drouillard  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 3/17/2010 appealing from the Office action mailed 10/15/2009.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

758530	Gross	7-1902
5491875	Siladke	2-1996

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**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-3, 5-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over patent 758530 to Gross, in view of patent 5491875 to Siladke.

Regarding claim 1, Gross discloses a hinge, comprising: a hinge body 12 having a first portion pivotably attached to a door 2, and a second portion pivotably attached to a body 1; a central control link 15 having a first link end and a second link end, with said central control link being pivotably attached to said hinge body 12 at a position mediate said first and second link ends (figure 2); a body link 19 having a first end pivotably attached to said body 1, and a second end pivotably attached to the first link end of said central control link 15; and a door link 17 having a first end pivotably attached to said door 2, and a second end pivotably attached to the second link end of said central control link 15. Gross does not disclose a vehicle or the location of the attachment between the control link and the hinge body at an offset location.

Siladke discloses a vehicle having a body 4 having a passenger compartment (figure 1) with a door opening 18; a door 14 sized to fit said opening 18, and a two hinge bodies attaching the door to the body on the C pillar with the hinge axes in a vertical orientation.

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply a hinge configured similar to that of Gross in the application of Siladke. Both deal in the art of hinges and the application of the Gross hinge to the purpose of Siladke would not require undue changes to a hinge configured similarly to

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that of the Gross hinge. This would have been motivated by the desire to reduce cost in design by using a known hinge in a known place to apply a hinge. Applying a hinge configured similar to the hinge of Gross in the environment of Siladke, would result in an upper and lower hinge with all of the included pieces having an upper and lower orientation.

In applying a hinge configured similar to that of Gross for the purpose of Siladke, it would have been obvious to one of ordinary skill in the art to modify the shape of the main body of the hinge (12 of Gross, 52 of Siladke), due to the shapes of the hinging articles (see door at point 86 of figure 4 of Siladke, which curves into the hinge's space). In changing the shape of the link in such a manner, whether it is a C-shaped piece or a L shaped piece, the connection between the main body and the central link has to be along the main body, which would be at an offset between the ends of the main body. Examiner notes that the body of a hinge similar to Gross would have a straight bar shape, and therefore the connection between the body and central link would have to be along a line connecting the pivot points of the body. On the shape modified body, which would be required by the hinged article similar to the environment of Siladke, the connecting point between the body and central link could not be on a line connecting the pivot points of the hinge body. It would have been obvious to one having ordinary skill in the art at the time the invention as made to alter the shape of the main body of Gross to accommodate use in the alternative use as taught by Siladke, as a change in the shape of a prior art device is a design consideration within the skill of the art. *In re Dailey*, 357 F.2d 669, 149 USPQ 47 (CCPA 1966).

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Regarding claim 2, Gross as modified a door hinge system according to Claim 1, wherein said hinge body comprises a rigid, C-shaped member having a first end pivotably attached to said door and a second end pivotably attached to said vehicle body. Gross as modified discloses the claimed invention except for a C-shaped hinge body member. It would have been obvious to one having ordinary skill in the art at the time the invention as made to slightly alter the shape of the body member, a change in the shape of a prior art device is a design consideration within the skill of the art. *In re Dailey*, 357 F.2d 669, 149 USPQ 47 (CCPA 1966).

Regarding claim 3, Gross as modified discloses a door hinge system according to Claim 1, wherein said second portion of said hinge body 12 is pivotably attached to a C pillar portion of a vehicle body (figure 1 of Sildake).

Regarding claim 5, Gross as modified discloses a door hinge system according to Claim 1, wherein said hinge body 12 is attached to said door 2 and to said vehicle body 1 for rotation about generally vertical axes, when applied in the manner of Siladke.

Regarding claim 6, Gross as modified discloses a door hinge system according to Claim 1, wherein said central control link 15 is attached to said hinge body 12 at a location offset longitudinally from the center of a line which is parallel to a line

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connecting the pivot points at which said hinge body is attached to said door and said vehicle body (please see figure 1 of Gross).

Regarding claim 7, Examiner notes that applicant is claiming the structure of the single hinge twice, since applicant discloses two hinges above each other in figure 3.

Gross discloses a hinge, comprising: a body 1 having an opening; a door 2 sized to fit said opening; a hinge body 12 having a first end pivotably attached to said door 2, and a second end pivotably attached to said body 1, such that said door 2 may be rotated about a plurality of axes; a central control link 15 having a first link end and a second link end, with said central control link 15 being pivotably attached to said hinge body 12 at a position mediate said first and second link ends (figure 2); a body link 19 having a first end pivotably attached to said body 1, and a second end pivotably attached to the first link end of said central control link 15; and a door link 17 having a first end pivotably attached to said door 2, and a second end pivotably attached to the second link end of said central control link 15. Gross does not disclose a vehicle, or the central link attaching to the main body at a lateral offset.

Siladke discloses a vehicle having a body 4 having a passenger compartment (figure 1) with a door opening 18; a door 14 sized to fit said opening 18, and a two hinge bodies attaching the door to the body on the C pillar with the hinge axes in a vertical orientation.

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the hinge of Gross in the application of Siladke. Both deal in the art

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of hinges and the application of the Gross hinge to the purpose of Siladke would not require undue changes to Gross hinge. This would have been motivated by the desire to reduce cost in design by using a known hinge in a known place to apply a hinge. In applying the hinge of Gross to the purpose of Siladke, the result is an upper and lower hinge with all of the included pieces having an upper and lower orientation.

In applying the hinge of Gross for the purpose of Siladke, it would have been obvious to one of ordinary skill in the art to modify the shape of the main body of the hinge (12 of Gross, 52 of Siladke), due to the shapes of the hinging articles (see door at point 86 of figure 4 of Siladke, which curves into the hinge's space). In changing the shape of the link in such a manner, whether it is a C-shaped piece or a 7 shaped piece, the connection between the main body and the central link has to be along the line of the main body, which would be at an offset between the ends of the main body. It would have been obvious to one having ordinary skill in the art at the time the invention as made to alter the shape of the main body of Gross to accommodate use in the alternative use as taught by Siladke, as a change in the shape of a prior art device is a design consideration within the skill of the art. *In re Dailey*, 357 F.2d 669, 149 USPQ 47 (CCPA 1966).

Regarding claim 8, Gross discloses a hinge, comprising: a body 1 having an opening; a door 2 sized to fit said opening; a hinge body 12 having a first end pivotably attached to said door 2, and a second end pivotably attached to said body 1, such that said door 2 may be rotated about a plurality of axes; a central control link 15 having a



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first link end and a second link end, with said central control link 15 being pivotably attached to said hinge body 12 at a position mediate said first and second link ends (figure 2); a body link 19 having a first end pivotably attached to said body 1, and a second end pivotably attached to the first link end of said central control link 15; and a door link 17 having a first end pivotably attached to said door 2, and a second end pivotably attached to the second link end of said central control link 15. Gross does not disclose a vehicle, or the main body and the central link attaching at an offset location.

Siladke discloses a vehicle having a body 4 having a passenger compartment (figure 1) with a door opening 18; a door 14 sized to fit said opening 18, and a two hinge bodies attaching the door to the body on the C pillar with the hinge axes in a vertical orientation.

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the hinge of Gross in the application of Siladke. Both deal in the art of hinges and the application of the Gross hinge to the purpose of Siladke would not require undue changes to Gross hinge. This would have been motivated by the desire to reduce cost in design by using a known hinge in a known place to apply a hinge.

In applying the hinge of Gross for the purpose of Siladke, it would have been obvious to one of ordinary skill in the art to modify the shape of the main body of the hinge (12 of Gross, 52 of Siladke), due to the shapes of the hinging articles (see door at point 86 of figure 4 of Siladke, which curves into the hinge's space). In changing the shape of the link in such a manner, whether it is a C-shaped piece or a 7 shaped piece, the connection between the main body and the central link has to be along the line of

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the main body, which would be at an offset between the ends of the main body. It would have been obvious to one having ordinary skill in the art at the time the invention as made to alter the shape of the main body of Gross to accommodate use in the alternative use as taught by Siladke, as a change in the shape of a prior art device is a design consideration within the skill of the art. *In re Dailey*, 357 F.2d 669, 149 USPQ 47 (CCPA 1966).

Regarding claim 9, Gross as modified and applied for the purpose of Siladke, the "body" to which the hinge is attached would be the C pillar of a vehicle.

Regarding claim 10, Gross as modified discloses the claimed invention except for a C-shaped hinge body member. It would have been obvious to one having ordinary skill in the art at the time the invention as made to slightly alter the shape of the body member, a change in the shape of a prior art device is a design consideration within the skill of the art. *In re Dailey*, 357 F.2d 669, 149 USPQ 47 (CCPA 1966).

#### **(10) Response to Argument**

Regarding claim 1, examiner has placed the structure of Gross as a replacement for the hinges used in Siladke. Applicant asserts examiner has misinterpreted Siladke, and made "unsupportable assumptions" (page 7 of the brief, second paragraph).

Regarding the less expensive assertion on page 7 of the brief, final paragraph, examiner has stated that the use of Gross in the location of Siladke was made to "reduce cost in design by using a known hinge in a known place" (page 3 of the final rejection). This reduces the cost of the design by using known parts in known

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applications. Regarding the assertion that Gross and Siladke are not configured similarly (also on page 7), examiner contends that both hinges provide a method to pivot one body against another.

Regarding the “incompatibility” (on page 8 of the brief, line 4), examiner still contends that the hinges of Siladke and Gross serve the same purpose in hinging articles. Examiner has put forth an obvious to change the shape as taught by Siladke so that one of ordinary skill in the art can alter the shape as necessary to apply the hinge of Gross to the purpose of Siladke. In order to apply Gross for the purpose of Siladke, it would have been obvious to one of ordinary skill in the art to alter materials, dimensions, or size of the parts, including accommodating the shape of the hinging article, to allow the hinge of Gross to properly function if used with a vehicle door. The structure of Gross if properly sized, would still pivot the door as shown by Siladke. The alteration of the main hinge body is not claimed in claim 1, but is claimed in claim 2, and will be discussed below.

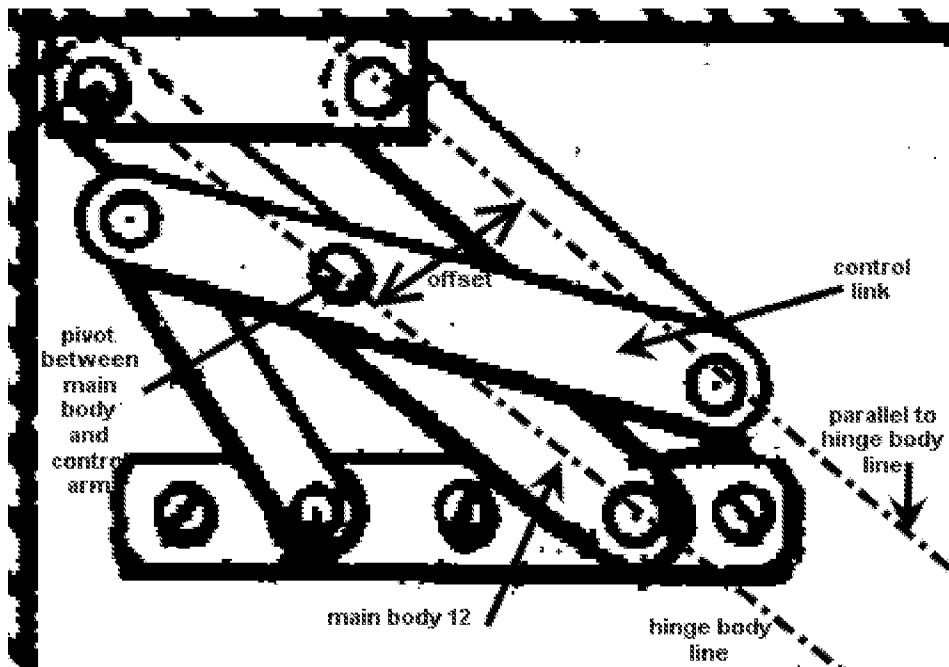
Regarding claim 2 on page 9 of the brief, Applicant asserts that there is no teaching of a C-shaped main hinge body in either Gross or Siladke. Examiner points to part 52 which is a C-shaped link in the Siladke hinge.

Regarding claim 6 on page 9 of the brief, applicant asserts examiner has not offered evidence supporting the contention. Appellant’s arguments however, are more limiting than the claims themselves. Claim 6 requires that the pivot point 44 (between the control link 40 and the hinge body 36) must be “offset longitudinally” from “the center of a line which is parallel to a line connecting the pivot points at which the hinge body is

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attached to said door and said vehicle body". In other words, pivot point 44 has to be offset from an arbitrary line that is parallel to the line between pivot points 42 and 38.

This means that the pivot point 44 between control arm 40 and hinge body 36 can be on the line between 42 and 38, since the line between 42 and 38 is parallel to the arbitrary line, and offset from the arbitrary line. Since examiner has shown that the pivot point between control arm 15 and main hinge body 12 is on the line between the pivot points connecting the main body to the door and the body, it is offset from an arbitrary parallel line (see modified figure below).



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**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Victor Batson/  
Supervisory Patent Examiner, Art Unit 3677

Emm

/EMM/

Conferees:

Victor Batson /vdb/

Heather Shackelford /hcs/