

College of Patent Agents & Trademark Agents

*Patent Agent Skills Examination
Part 1 Component A Sample Exam*

Purpose statement: The sample exam and sample answers are for informational and preparatory purposes only. They are intended to offer prospective test-takers a general understanding of the type and format of questions that may appear on the skills examination, as well as to demonstrate the level of detail expected in responses. For more information, refer to: <https://cpata-cabamc.ca/en/become-an-agent/information-patent-agent-qualifying-examinations/>

Representation: The sample exam does not represent the full range of topics, difficulty levels, or types of questions that may be encountered on the actual exam. The actual exam may contain questions that differ significantly in form and content. The subject matter is the same across both Components A and B of Part 1 for illustrative purposes. The subject matter for each component in Part 1 will be different on the actual examinations.

Predictive value: Performance on this sample exam should not be taken as an indicator of future performance on the corresponding skills examination. This sample is not intended to predict exam outcomes and should not be used as a test-taker's sole preparation material.

Answer key: The sample answers provided are for illustrative purposes only. They represent one of several possible approaches to answering these sample questions. Actual exam responses may vary, and there may be multiple valid ways to address a question.

Updates and changes: Exam content and policies are subject to change. While we aim to keep our preparation materials up-to-date, the sample exam and answers may not reflect the most current version of the actual examination.

No guarantee: Using these sample materials does not guarantee success in the actual skills examination. Examinees are encouraged to engage in comprehensive study and preparation to enhance their understanding of the subject matter.

Confidentiality: The actual examination content is confidential.

Feedback: Feedback on these sample materials is welcome. However, please be aware that individual responses or specific guidance on exam preparation cannot be provided.

Examination information

The *Patent Agent Skills Examination Part 1* takes place over two (2) days. Test-takers have three (3) hours on one day to complete Component A. Test-takers have three (3) hours on a subsequent day to complete Component B. Both components focus on strategy and drafting, each with its own background information and prior art. Each component is worth 75 marks; the two (2) components are scored together as a single examination worth 150 marks.

Component A consists of 5 questions worth a total of 75 marks.

Component B consists of 6 questions worth a total of 75 marks.

Components A and B will be scored together.

During the examination, test-takers have electronic access to the *Patent Act*, RSC 1985, c P-4 (“Patent Act”) and *Patent Rules*, SOR/2019-251 (“Patent Rules”), in addition to other background information or resources necessary to respond to the examination questions.

Instructions for test-takers

Review any background information provided. Answer the questions.

Avoid extraneous commentary not directly relevant to the question. Do not assume facts that are not provided.

When asked to support an answer, include relevant discussion or reasoning. While relevant source references (e.g., to case law, statutory provisions, or regulatory provisions) may be helpful to include, separate marks are not provided for such references unless specified in the question.

Point-form answers are acceptable, except where expressly indicated.

Component A (3 hours, 75 marks)

Background

A description of the technology, as the hypothetical inventor understands it, is provided in the form of a memo to file. The inventor has also provided the attached drawings. A search has been performed to assist you in evaluating the actual scope of the inventor's invention. The search has revealed the following pertinent references, namely: US Patents X,XXX,784 (D1), X,XXX,052 (D2), and X,XXX,953 (D3). You will assume the search is the most relevant of the prior art and you are cautioned not to impart your own knowledge into your analysis and preparation of the patent application.

Drawings

You have been provided with duplicate unmarked copies of the drawings for your use.

Memo to file – 17 November 2023

Notes taken during a video conference call with client, file XXXXX-####

Development Background

Client called regarding idea for an automobile accessory:

- Built a prototype windshield protector to protect windshield against snow and ice
- Not yet shown it to anyone
- Conducted some market research (says performed confidentially)
- Doesn't have capability to manufacture
- Wants to proceed with a patent application and file before disclosure
- Plans to meet several potential investors on Friday

Invention Description

Device for protecting windshield when car is parked for extended periods

- A continuous cover overlaying the windshield (client screen shared a "Fig. A", client emailed a full set of the drawings during the call which have been saved to the file)
- Client wants to use polyvinyl chloride (PVC), such as is used in raincoats
 - Considering other flexible water-resistant materials
- The cover has windshield-shaped periphery with side, top and bottom edges

It was necessary to find a way to keep the cover from sliding off windshield due to built-up snow or blowing wind

Used a support structure connected to the cover that supports the cover over the windshield in an extended state

- This keeps it from sliding down under weight of snow
- As shown in Figs A and B, support structure uses two adjacent and separate rectangular wire frames
 - Each wire frame includes a side support member that is close to side edges of the cover
 - Extends from the top edge to the bottom edge of the cover
 - Top and bottom support members extend from the side support member along the top and bottom edges of the cover, respectively
 - A central support member interconnects the top and bottom support members
- Other possible ways to configure support structure are shown in other figures

Near the two side edges of the cover there are attachment elements with loop members.

- These hold the cover to the car securely – keep the device from being blown off by wind
- This arrangement is easy to use, by looping around the side mirrors to secure to the car
- In Figs A and B, the loop members are elastic closed loops that loop around the mirrors
 - Closed loops need to be elastic for easy installation and removal

Client says product, particularly the support structure, must be collapsible or it is unmarketable – referred to Fig D

- Once snow is shaken off the water-resistant cover, the wire frames can be folded over one another, resulting in a rectangular cover of double the thickness
- Twisting the folded frames causes the wire framing to give and the device can then be tucked into a bag
- Stored like this, the bag may slot easily into a trunk
- When sold, the product can be shipped in this folded configuration and this would reduce shipping costs

Variations

Client noted that attachment elements included mirror covers in Figs A and B, but the device could be provided without mirror covers

- Protecting the mirrors is not as much of an issue since it is comparably easy to remove snow from side view mirrors
- Side mirror covers protect the side view mirrors from accumulation of snow and ice
- Side mirror covers are shaped like mittens, a “hand” portion covers the mirror and a “wrist” portion is an elastic closed loop that serves as the loop member previously mentioned

Another prototype is shown in Fig C. It uses a variant of the support structure

- Here, two side support members are in the form of straight ribs
- One rib each is on each side of the cover
 - The two ribs provide support to maintain the continuous cover over the windshield in an extended state
 - Tested intermediate spaced-apart ribs but the extra sturdiness was unnecessary given the sufficiency of the support provided by the two ribs
 - Cost-benefit analysis supports omitting the intermediate ribs in a commercial product
- This support structure is collapsible by moving the support members towards each other, and then grabbing the ribs at either end of the cover, causing the device to collapse onto itself

I asked the client about utility of the device in summer conditions

- Product could be used as a heat shield, but there are cheaper alternatives
- Design is best used and most marketable as protection against precipitation, mainly snow
- Client is considering a higher end model that has a heating wire embedded in the cover for melting the ice
 - Heating wire could be connected to the car to heat up and melt off the snow when the car is started (such as when using a remote starter)

I asked the client about device security and whether the product could be easily stolen.

Client:

- Says that market research suggests this is not a significant risk, but considering models with a lock-strap connected to the support structure (client referred to Fig. B)
- Is considering whether all product lines should have the lock-strap, or only the higher end models (may be cheaper to fabricate this element on all models universally)
- Says that lock-strap has a buckle or another enlarged element at its free end
 - A heavy, flexible, cut-resistant wire can be embedded in the lock-strap for extra protection
 - When the buckle is secured inside the vehicle and the lock strap is pinched between door and door frame then the device is secure

Client mentioned that the device should attach to the vehicle at both sides of the car – if the cover is secured only on one side, then the other side would be free to lift away and could be blown across by wind

Client mentioned that other attachment element arrangements could be employed – for example the attachment element can secure to either the cover or to the support structure, or both

Attachment elements could be connected to the side edges of the cover or to other areas of the device, such as closer to the bottom edge of the cover (client referred to Fig. C as an example)

Other possibilities for loop members as well.

- Loop member could have complementary elements that are not a pre-formed closed loop but are attachable to form the closed loop
 - E.g. Velcro™, belt attachments, snaps, buttons
- One or both loop members could engage other elements of the car – such as securing to the steering column or the gear shift
 - Could give anti-theft benefits

Considering a variation on the mittens in which the mittens have a triangular structure.

- A wire framework could be used to give a triangular shape with a steep apex pointing upwards
 - Steep faces enable snow to slide off the mittens
 - Business logo can be placed on the front and rear sides of the mittens (i.e. the forward and rearward directions of the vehicle) to display the mark to pedestrians and passing traffic
- Client hired a designer to develop an eye-catching design for the wire framework
 - Disagreements with the designer, the designer ended contact and took the unfinished designs
 - Client still has preliminary mock-ups, but these need further work
 - Looking for a new designer

Client described a special coating that is applied to the PVC to make it hydrophobic

- The coating improves the performance of the cover with melting snow and ice
- Special application process for the coating gives a superior texture and resilience to the coating
- Client wants to keep this process in house for the time being

Final Comments

- Client did their own preliminary prior art search and identified three documents (saved to file as D1, D2 and D3)
- Client wants to file urgently (upcoming public disclosure), but mentioned being interested in having a supplementary prior art search – was in favour of requesting a patentability search by a searcher after the initial application has been filed

The front page and figures of D1 follow here:

United States Patent

Patent Number: X,XXX,784

(D1)

Shield et al.

Date of Patent: Jan. 1, 1989

AUTOMOBILE SUNSHIELD

The present invention relates to sunshields and specifically to automobile sunshields or shades. The sunshield of the present invention may be positioned against an interior window surface, such as the windshield, to act as a barrier and protect the interior of the motor vehicle against sun rays. This thereby reduces undesired weathering caused by sun rays and reduces the heat which tends to build up within the vehicle interior.

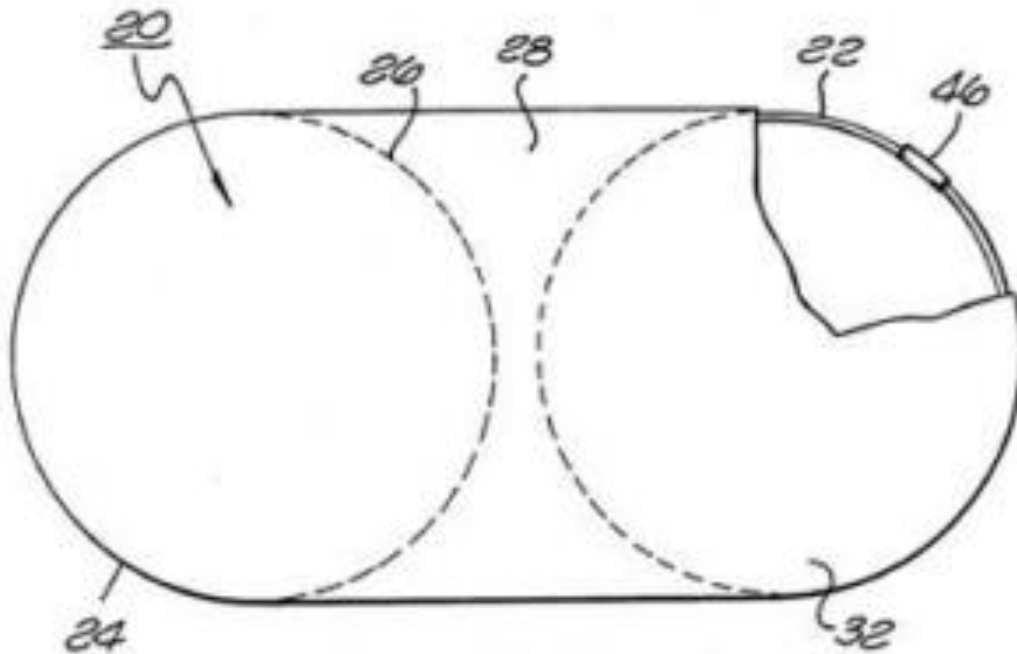


FIG. 1

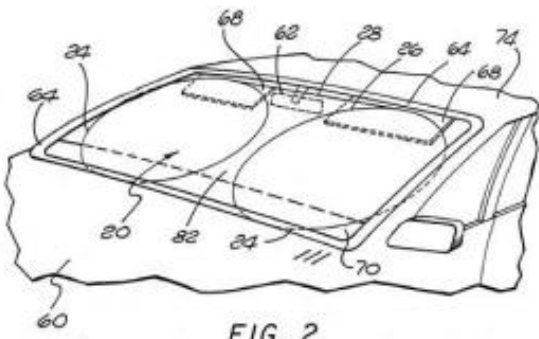


FIG. 2

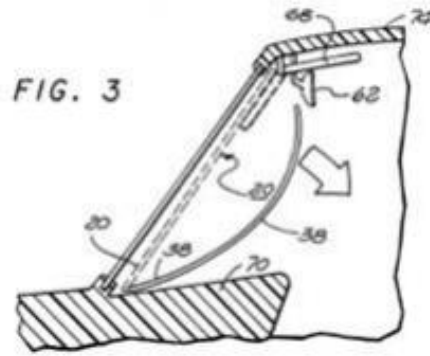


FIG. 3

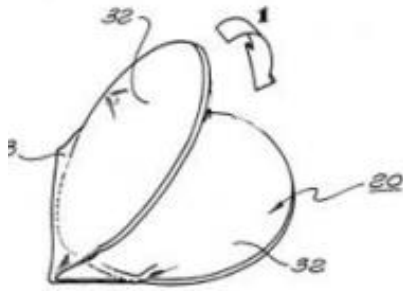


FIG. 4(A)

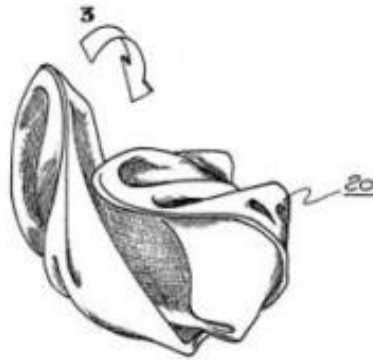


FIG. 4(B)

FIG. 4(C)



FIG. 4(D)



FIG. 4(E)

The front page and figures of D2 follow here:

United States Patent

Patent Number: X,XXX,052

(D2)

Cover et al.

Date of Patent: Jan. 1, 1949

WINDSHIELD COVER

This invention relates to automobile accessories and more particularly to a cover which is primarily intended for use on windshields of automobiles to protect them from being covered with snow, sleet, frost or fog.

Fig. 1 is a perspective front view of a windshield cover embodying our invention; the same being shown attached to the windshield of an automobile which is indicated in dotted lines.

Fig. 2 is a side view of side mirror covers according to another embodiment.

Fig. 3 is a rear view of the cover of Fig. 1.

Fig. 4 is a fragmentary sectional view illustrating the manner in which the suction cups are fastened to the windshield cover.

As shown in the drawing, our improved windshield cover is preferably constructed of a sheet of flexible material 5, such as plastic, or waterproof cloth, and may be provided with a peripheral binding strip 6 if desired.

Fig. 1.

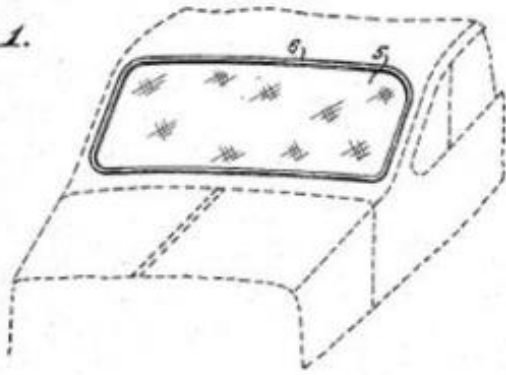


Fig. 2.

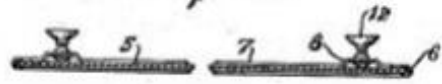


Fig. 3.

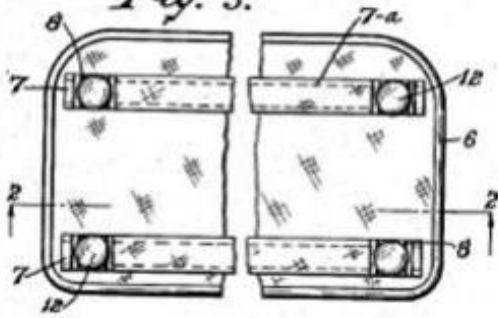
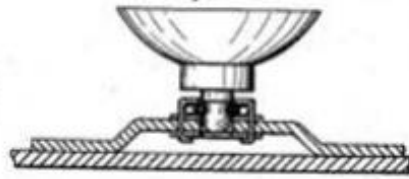


Fig. 4.



The front page and figures of D3 follow here:

United States Patent

Patent Number: X,XXX,953

(D3)

Protect et al.

Date of Patent: Jan. 1, 2010

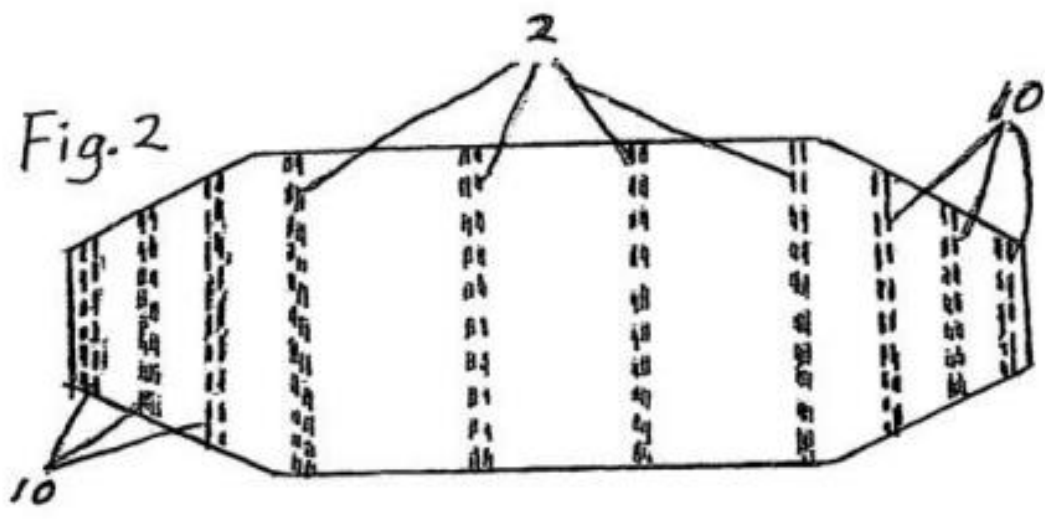
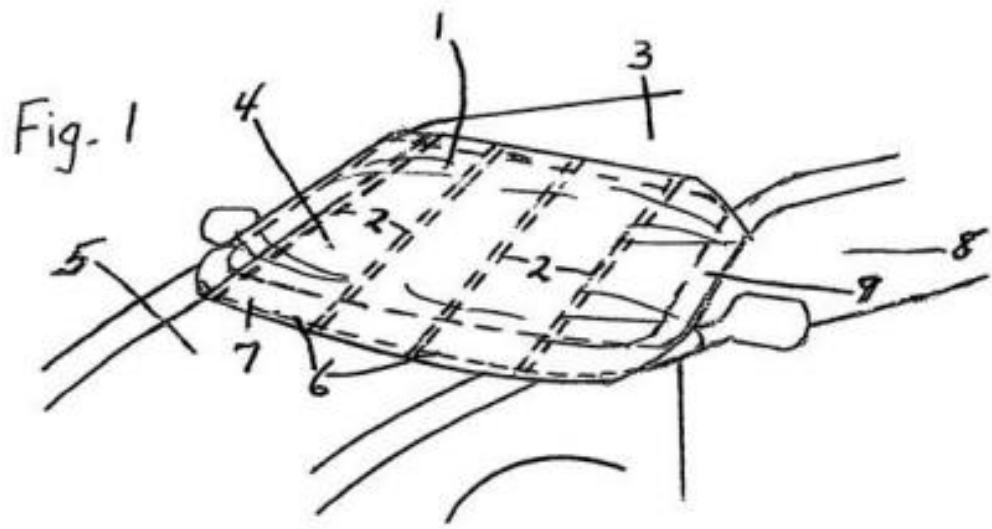
COVER FOR WINDSHIELDS

This invention relates to devices for preventing the accumulation of snow, ice, and frost on the windshields, windshield wipers, air intake manifolds, and rear windows of vehicles. In addition, when used in the presence of sunlight, this invention relates to devices designed to protect a vehicle's interior surfaces and ambient air from heat build-up caused by the sun's rays.

FIG. 1 shows the device installed over the front windshield, windshield wipers, and air intake manifold of a vehicle, with the ends of the cover tucked between the doors and the doorframes of the vehicle.

FIG. 2 is a plan view of the cover.

FIG. 1 is a front view of the cover 1 made of opaque, reflective, snow-and-ice-repellent material such as, but not limited to, plastic or plastic-coated sheeting, which can be of any color desired. The cover 1 has a plurality of rigid supporting rods 2 attached to the underside of the cover, designed to span the space from the roof 3 of the vehicle to the hood 5 of the vehicle. The right and left ends of the cover 1 are designed to be enclosed within the vehicle, pinched between the vehicle doors 8 and the doorframes 9. These ends have a means, such as, but not limited to, short rods, also attached to the cover 1, designed to prevent the cover from being pulled out of the closed doors 8 of the vehicle.



Question 1 [11 marks in total]

Based on the background information and prior art, prepare a brief memo to file that summarizes the key considerations in approaching this patent application. The summary (which may be in point form) should not exceed 500 words.

The summary should briefly address the client's needs and goals [5 marks], any notable aspects of the innovation context [4 marks], and any notable costs or benefits of patent protection in this case, with a brief rationale [2 marks].

Question 2 [12 marks in total]

Based on your analysis in question 1, identify reasoned claim drafting objectives for a potential patent application. Your answer should:

- (a) reflect at least one inventive concept for a single article of manufacture (i.e., an apparatus style claim) and the strategic, legal, or commercial advantage it provides [5 marks];
- (b) distinguish between the inventive concept and the embodiments proposed by the inventor, highlighting which features are "additional" to the underlying inventive concept and are differentiated from the prior art [2 marks]; and
- (c) reflect on the scope of an additional independent claim of any type and the strategic, legal, or commercial advantage it provides. [5 marks]

Question 3 [30 marks in total]

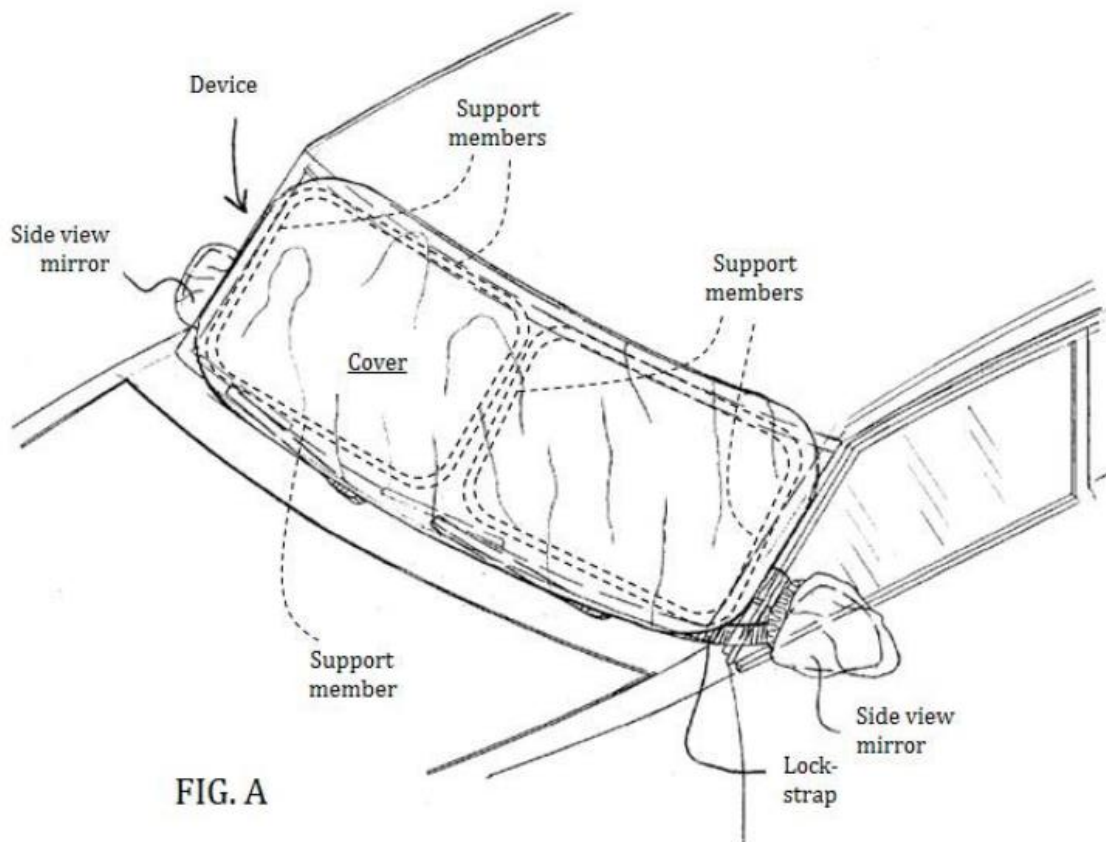
Based on the claim drafting objectives identified in question 2:

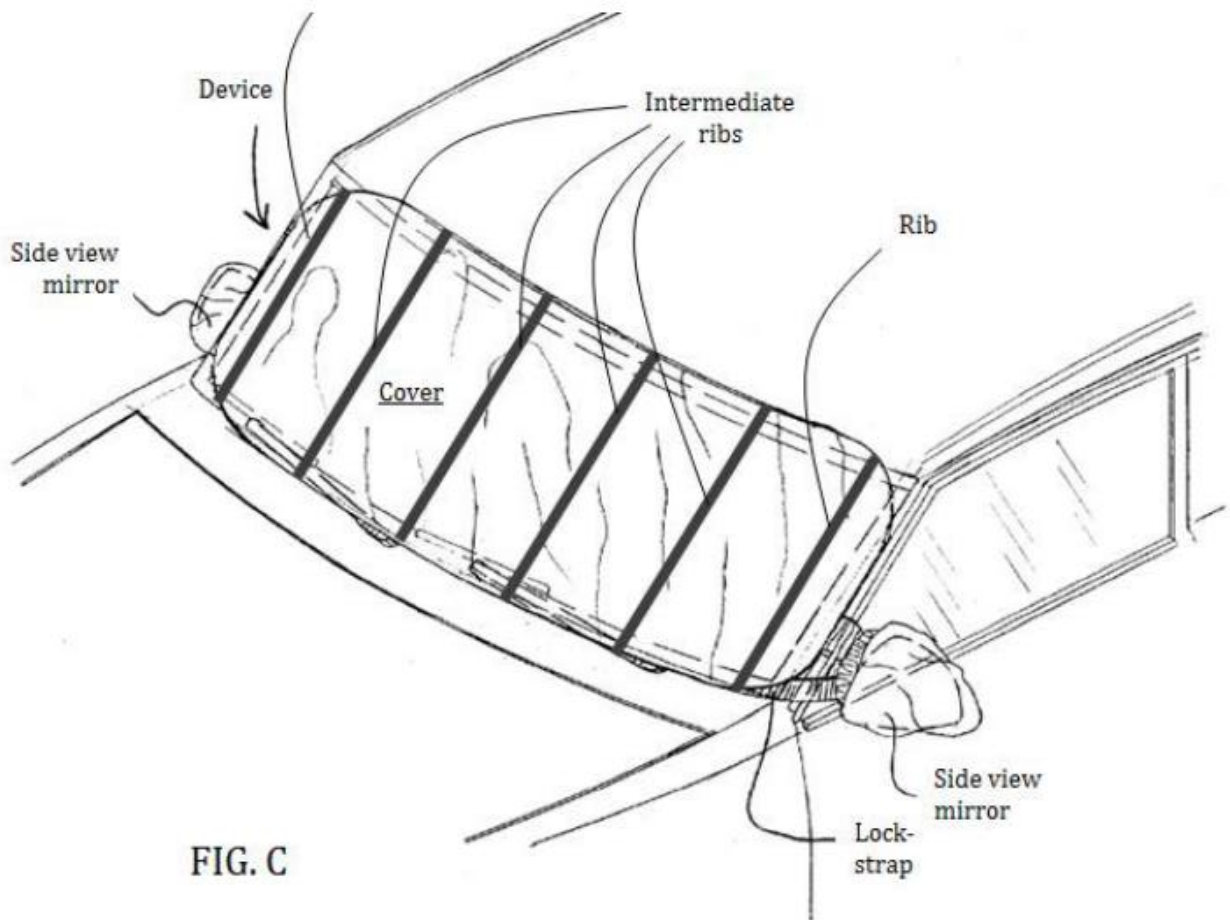
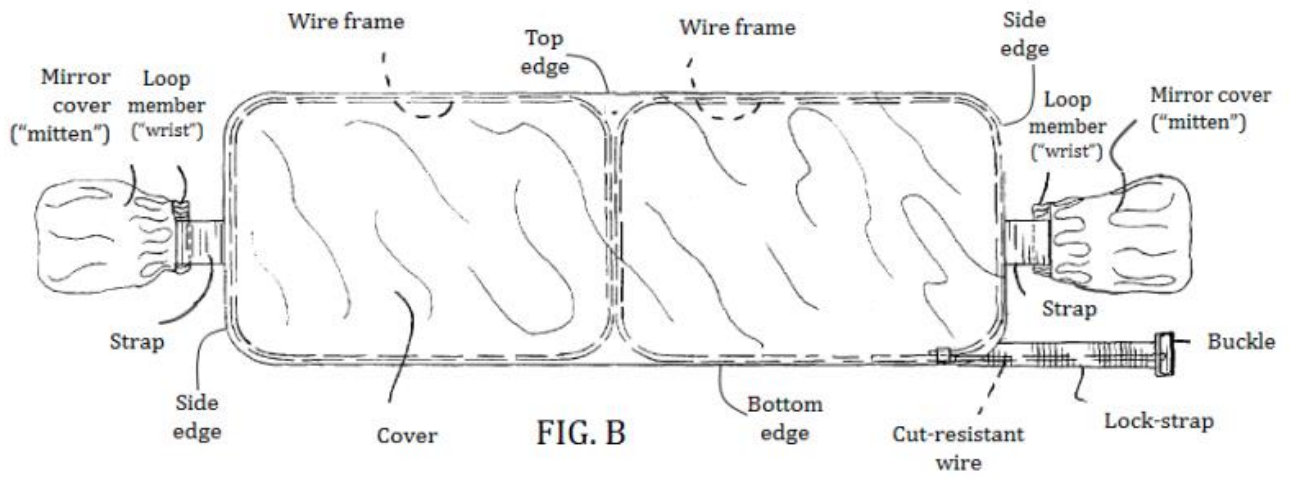
- (a) Draft an independent claim for a single article of manufacture (i.e., an apparatus style claim) [25 marks]; and
- (b) Explain the scope and breadth of the claim as drafted in 3(a) and how it is differentiated from the prior art [5 marks].

Claims require proper scope, characteristics, and structure. Claims must meet the requirements of the *Patent Act* (e.g., section 27) and the *Patent Rules* (e.g., section 60), reflect the identified claim drafting objectives, and have a logical organization. No dependent claims are required.

Question 4 [6 marks in total]

Consider the drawings provided below from the inventor that illustrate features of this invention and advise the inventor which views will be suitable for inclusion in the patent application, which views will be suitable if modified (including briefly outlining the necessary modification), and what additional views (if any) should be provided. Explain why you are recommending including these drawings to the inventor and how they can support the description and claim of question 3. [6 marks]





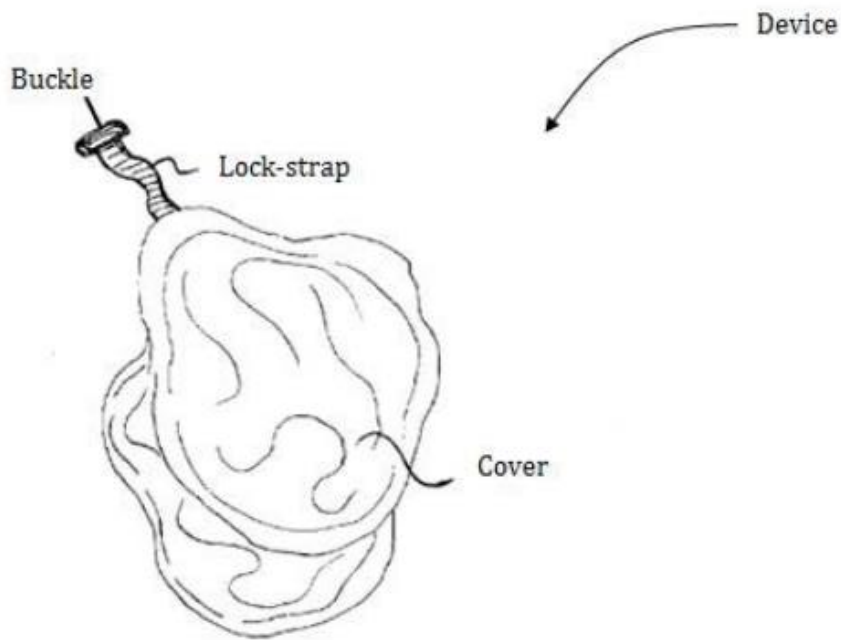


FIG. D

Question 5 [10 marks in total]

For the purposes of Question 5, assume that the following passages and references were included as part of the original client interview.

Client: As an additional security system for the variations of my invention which incorporates a buckle, I am considering embedding a wireless device in the buckle. The wireless device could be automatically engaged in an alarmed state once the lock strap is pinched between the door and door frame. This could use a pinch sensor, for example. A fob, attachable to the user's car keys, would be required to disarm the wireless device using short-range radio frequency identification (RFID). Opening the door of the vehicle without disarming the wireless device would then set off the alarm and send a notification to the owner of the vehicle. The combination of the buckle, wireless device and the lock-strap would then help secure the cover against theft and provide early notification of break-in attempts on the vehicle.

You: That sounds like a useful extra piece of security.

Client: As an aside, in windier snowstorms, snow may creep underneath the bottom edge of the windshield cover. This is especially frustrating when the snow melts and then refreezes, sometimes causing the windshield wipers to adhere to the windshield. To address this problem, I am considering providing a pair of flexible windshield wiper covers in some models. The windshield wiper covers are flexible cylinders of PVC, similar to that used for the windshield cover. Once sheathed over the windshield wiper, each windshield wiper cover could be fastened to the remainder of the windshield cover, such as by Velcro™ fasteners. Unfortunately, I don't have any additional finished drawings to illustrate this design for you, but imagine a pair of PVC cylinders which can be fastened to the bottom edge of the windshield cover.

Question 5(a)

Based on the fact pattern presented and the objectives of the client provided in the transcript, briefly summarize two facts regarding the additional security system that you would provide to the patent searcher and explain why you would advise the searcher of these facts **[4 marks]**.

After the interview, you instructed your patent searcher to conduct a search. Their report identified two references, each reference containing one of the following figures.

Fig. 1 is from reference X,XXX,551. In Fig. 1, element 190 comprises a windshield wiper flap, which may be made of PVC.

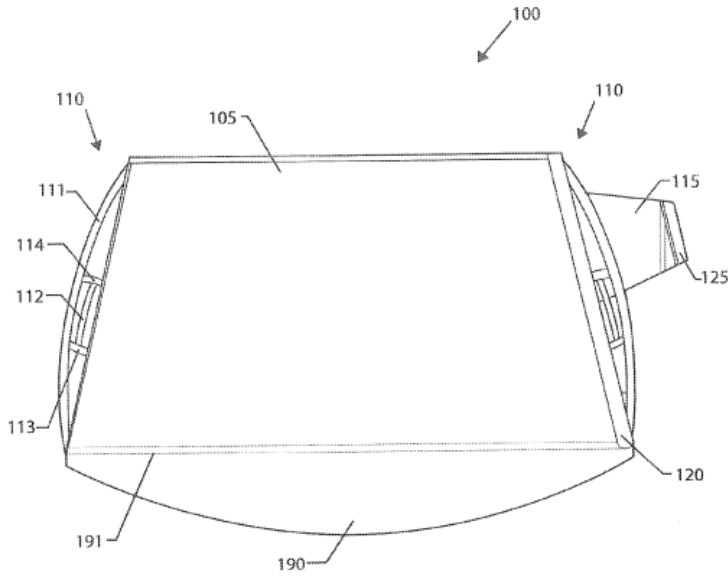


Fig.1

And from a second reference, X,XXX,102, there is Fig. 2:

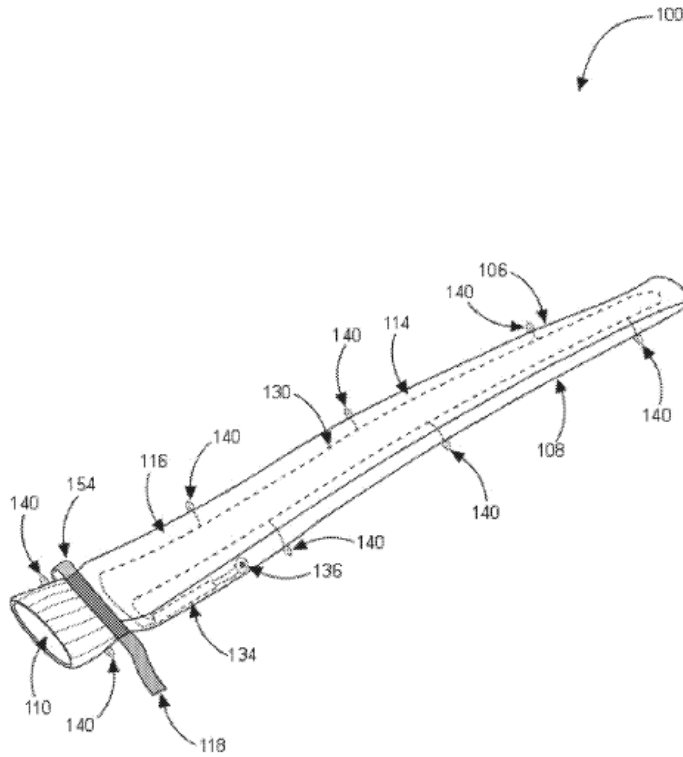


FIG. 2

In Fig. 2, protective covering device 100 for windshield wiper arms 160 to protect against ice and snow is disclosed herein, comprising at least one elongated sheath member 106 formed from insulating material 108 and having central opening 110. Insulating material 108 is formed from a foam rubber material, and exterior coating 114 formed from TEFLON or a similar coating is applied to exterior surface 116 of protective covering device 100 to prevent sticking and corrosion. Elongated sheath member 106 is adapted to be placed upon a windshield wiper arm 160 to protect against ice and snow build-up, and are sold in pairs. Each respective elongated sheath member 106 is adapted to cover one of two windshield wiper members 160 of a vehicle 162.

Question 5(b)

Clearly explain in detail how the references located by the patent searcher may be relevant to (i) novelty and/or (ii) inventiveness of the windshield wiper cover embodiment **[10 marks]**.

Question 5(c)

State whether your communication to the patent searcher is subject to patent agent privilege, stating briefly why or why not **[2 marks]**.