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<p>(21) International Application Number: PCT/US94/07342 (22) International Filing Date: 29 June 1994 (29.06.94) (71) Applicant (for all designated States except US): ZENO MANUFACTURING COMPANY [US/US]; 410 N. Michigan Avenue, Chicago, IL 60611-4287 (US). (72) Inventor; and (75) Inventor/Applicant (for US only): GREENBERG, Michael, J. [US/US]; 1633 Brighton Court, Northbrook, IL 60062 (US). (74) Agent: BARRETT, Robert, M.; Hill, Steadman & Simpson, Sears Tower, 85th floor, 233 S. Wacker Drive, Chicago, IL 60606 (US).</p>		<p>(81) Designated States: US, European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). Published <i>With international search report.</i></p>
<p>(54) Title: METHOD OF REMOVING CHEWING GUM FROM SURFACES (57) Abstract A non-flammable, non-combustible, and effective method for removing chewed gum from surfaces including carpeting, cement, and clothing is provided. Pursuant to the method, methyl salicylate is used to remove the chewing gum. It has been found that the methyl salicylate will effectively remove chewing gum from surfaces without leaving a stain on the fabric to which the chewing gum may be attached, e.g., carpet or clothing. To this end, the present invention provides method for removing chewed gum from a surface to which it is attached comprising the steps of contacting the chewed gum with a composition including methyl salicylate and then removing the chewed gum.</p>		

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S P E C I F I C A T I O NTITLE**"METHOD OF REMOVING CHEWING GUM FROM SURFACES"**BACKGROUND OF THE INVENTION

5 The present invention relates generally to chewing gum. More specifically, the present invention relates to methods and compositions for removing chewing gum from surfaces.

10 For hundreds of years, people have enjoyed chewing gum-like substances. In the late 1800's, the predecessor to today's chewing gum compositions were developed. Today, chewing gum is enjoyed daily by millions of people worldwide.

15 Chewed gum is easily disposed of in the wrapper that initially houses the chewing gum. Likewise, chewed gum can be disposed of in other substrates by wrapping the substrate around the chewed gum.

20 Although chewed gum can be easily disposed of without creating any problems, chewing gum that is improperly disposed of can create environmental concerns. In this regard, the improper disposal of chewing gum, i.e., expectorating of chewing gum on a sidewalk, floor, carpeting, or like area, can create a nuisance. Typical chewing gum, due to its formulation, after it is chewed,
25 has adhesive-like characteristics. Therefore, chewed gum can stick to surfaces to which it is placed. As the gum residue ages, it becomes hard and brittle making it difficult, if not impossible, to peel away from the surface to which it is attached.

30 Unfortunately, many consumers do not properly dispose of chewed gum. Thus, in areas such as parks, amusement parks, shopping centers, offices, and other public areas, chewed gum is expectorated on sidewalks and

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like surfaces, stuck on walls, masonry, furniture, carpeting, or other structures. This thereby necessitates the manual removal of stuck chewing gum using a scraping device or other means. Depending on the length of time after placement of the chewed gum and the attempt at removal of same, it may not be possible, using heretofore practiced methods, to easily remove all of the chewed gum from the structure to which it is stuck. Even if the gum is removed, typically, the process of removal will result in a stain or other mark on the surface.

A further problem is that if chewed gum is deposited on the ground, sidewalk, or other surface and is stepped on, the chewed gum can attach to a person's shoe. Chewed gum can then be transferred from the person's shoe to another surface such as a upholstery, carpet, or clothing. Chewed gum, due to its adhesive nature, using current prior art methods, may be difficult if not impossible to remove from carpet-like surfaces or clothing.

Methods that have been proposed and attempted to remove chewing gum include techniques, such as freezing the gum with freon, propane, and butane. However, such methods are environmentally unsafe. Professional cleaners attempt to remove chewing gum from clothing using solvents, such as petroleum distillates. However, these compounds are flammable or combustible and can be toxic.

A variety of household remedies have been tried to remove chewing gum from surfaces including clothing. Such methods typically utilize household items, such as peanut butter, ice, and oil of clove. However, these methods are largely ineffective.

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A number of methods have been disclosed in patents and published patent applications for attempting to remove chewing gum. Examples of such methods include PCT Patent No. 92/00836 which discloses the use of
5 ricinoleate derivative compositions to remove chewing gum adhering to surfaces. EPO Patent No. 0376779 discloses a liquid adhesive spot removing and cleaning composition and its use to remove chewing gum. Japanese Patent No. 93-179294 discloses a spot and stain remover specifically
10 for use with tacky materials such as paint and chewing gum. Japanese Patent No. 93-247494 discloses a chewing gum remover made with a powder and a solvent that is designed to remove chewing gum from road surfaces. U.S. Patent No. 5,287,582 discloses a mechanical scraper for
15 removing unwanted materials adhering to a floor.

Indeed, in order to address this issue, chewing gum formulations have been modified. U.S. Patent Application Serial No. 08/174,175, filed on December 27, 1993
entitled: "ENVIRONMENTALLY FRIENDLY CHEWING GUM
20 COMPOSITION CONTAINING ELASTIC PROTEIN-BASED POLYMERS" discloses a chewing gum composition that is environmentally friendly. The chewing gum composition includes polymers that will make the chewing gum brittle after it is expelled by the consumer and can therefore
25 be easily removed from surfaces to which the chewed gum is placed or attached.

SUMMARY OF THE INVENTION

The present invention provides a non-flammable, non-
30 combustible, and effective way to remove chewed gum from surfaces including carpeting, cement, and clothing. Pursuant to the present invention, methyl salicylate is used to remove the chewing gum. It has been found that

the methyl salicylate will effectively remove chewing gum from surfaces without leaving a stain on the fabric to which the chewing gum may be attached, e.g., carpet or clothing.

5 To this end, the present invention provides method for removing chewed gum from a surface to which it is attached comprising the steps of contacting the chewed gum with a composition including methyl salicylate and then removing the chewed gum.

10 In an embodiment, the composition includes at least 10% methyl salicylate.

 In an embodiment, the composition, comprises 100% methyl salicylate.

15 In an embodiment, the method includes the step of using a flexible sheet of plastic to remove the chewed gum.

 In an embodiment, the method includes the step of attempting to remove as much chewed gum as possible from the surface and contacting the remaining residue chewed gum with methyl salicylate. In an embodiment, a flexible plastic sheet of material is used to remove the chewed gum before contacting the residue with methyl salicylate. In a further embodiment, the flexible plastic sheets are constructed from at least one material chosen from the group consisting of low density polyethylene, low density polyvinyl chloride, and low density polypropylene.

25 In an embodiment, the chewed gum is wetted with the methyl salicylate and allowed to stand for at least one minute before the chewed gum is removed.

30 In another embodiment, a method for removing chewed gum from a surface is provided that comprises the steps of attempting to remove at least a portion of the chewed gum from the surface, contacting a residue portion of the

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chewed gum on the surface with a methyl salicylate containing composition, and removing the residue portion of the chewed gum from the surface.

5 In another embodiment, a method for removing chewed gum from a surface to which it is attached comprising the steps of using a flexible sheet of plastic to remove at least a portion of the chewed gum from the surface and contacting a residue portion of the chewed gum with methyl salicylate and using a flexible sheet of plastic
10 to remove the residue portion of the chewed gum from the surface.

An advantage of the present invention is that it provides a method for effectively removing chewing gum from surfaces.

15 Another advantage of the present invention is that it provides a non-flammable, non-combustible method for removing chewing gum from surfaces.

20 Additionally, an advantage of the present invention is that it provides a method for removing chewing gum from carpeting.

Furthermore, an advantage of the present invention is that it provides a method for removing chewing gum from clothing without staining same.

25 Still further, an advantage of the present invention is that it provides a method for removing chewing gum from surfaces that does not require flammable or combustible chemicals.

30 Moreover, an advantage of the present invention is that it provides a method for removing chewing gum from surfaces using components that are readily available/accessible to consumers.

Additional features and advantages of the present invention are described in, and will be apparent from,

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the detailed description of the presently preferred embodiments.

DETAILED DESCRIPTION

5 OF THE PRESENTLY PREFERRED EMBODIMENTS

 The present invention provides methods for removing chewing gum from surfaces. The present invention can be used to remove chewing gum from essentially any surface to which it may be stuck. In this regard, the method can
10 be used to remove chewing gum from concrete, furniture, walls, carpeting, clothing, flooring, and other surfaces to which chewing gum is typically either intentionally or unintentionally stuck. Pursuant to the present invention, methyl salicylate is used to remove the
15 chewing gum from the surface. The methods of the present invention are safe and effective ways to remove chewing gum from surfaces.

 Methyl salicylate is commonly referred to as oil of wintergreen. It is a readily available composition to
20 consumers (as oil of wintergreen or in pain relief liniments, etc.); the product is available at hardware, drug, and grocery stores. Methyl salicylate is not flammable, combustible, or otherwise harmful to the environment. In this regard, it is an "environmentally
25 friendly" composition. It has been discovered that methyl salicylate is a potent gum plasticizer/softener. Because methyl salicylate does not dissolve or soften fabrics including such compositions as nylon, it can be used to safely remove gum from fabrics. Additionally,
30 because methyl salicylate emulsifies easily with soap and water and has an agreeable odor, it can be used to remove chewing gum and is easily removed from the surface without an offensive odor, stain, or residue.

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Pursuant to the method of the present invention, methyl salicylate is used to remove chewing gum effectively from any surfaces. Even though, as chewing gum residue ages, the gum residue becomes hard and brittle making it difficult, if not impossible, to peel away, methyl salicylate has been found to soften and plasticize the gum sufficiently so that it can be easily removed from surfaces including fabrics and carpet.

Accordingly, in one of its simplest embodiments, the method of the present invention comprises the step of contacting chewing gum residue with a methyl salicylate containing composition. Typically, the entire residue of chewing gum will be wetted with the methyl salicylate composition. After waiting for a short period of time, e.g., approximately one to two minutes, the chewing gum can then be easily removed from the surface. A variety of substrates can be used for removing the chewing gum from the surface, e.g., a plastic sheet.

Pursuant to the present invention, a variety of methyl salicylate containing compositions can be used. In a preferred embodiment, the methyl salicylate containing composition comprises at least 10% methyl salicylate. However, a variety of ranges of compositions of methyl salicylate can be used including 100% methyl salicylate.

In an embodiment of the present invention, plastic sheets of material are used in the method for removing chewing gum. In this regard, pursuant to a preferred embodiment of the method of the present invention, first one attempts to remove as much of the chewing gum as possible using a flexible plastic sheet. After as much chewing gum has been removed from the surface, e.g., carpet, the remaining chewing gum residue is contacted

with methyl salicylate. In an embodiment, the entire chewing gum residue is wetted with the methyl salicylate. The chewing gum and methyl salicylate is then allowed to react for a period of time, preferably, at least one
5 minute, most preferably, at least two minutes. A flexible sheet of plastic is then used to remove the remaining residue chewing gum which, due to the methyl salicylate, will now be easy to remove from the surface, e.g., carpet.

10 In an embodiment of the method, a twisting motion is used to remove the residue chewing gum. In a further embodiment, clockwise and counterclockwise twisting motions are used. In this regard, first a clockwise
15 twist (or counterclockwise twist) of the chewing gum is performed and then a counterclockwise (or clockwise) twist of the chewing gum residue is performed. The twisting motion should remove even the most difficult residue chewing gum from fabrics and carpeting.

20 A variety of different plastics can be used to create the flexible sheets of material. In a preferred embodiment, a low density polyethylene or low density polypropylene blend of plastic is used to create the flexible sheets of plastic. However, other plastic
25 materials can be used including ethylvinyl acetate, polyvinyl chloride, polyvinylidene chloride and the like. What is important is that the sheets are flexible. Preferably, the plastic material is also clear so that it is easily visible. This will allow one to easily determine the amount of chewing gum removed.

30 The flexible nature of the plastic sheets allows the material to be sufficiently pliable to penetrate small spaces where the chewing gum may adhere. This is especially advantageous for removing gum from carpeting.

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Additionally, because the plastic sheets are hydrophobic, the sheets will attract the rubber/fat/resin matrices of the chewing gum residue increasing the effectiveness of the method. It is envisioned that in removing chewing gum from carpeting, the use of flexible sheets may be a preferred method. On the other hand, when removing chewed gum from concrete or clothing, flexible sheets may not be required.

A further advantage of the plastic matrix of the sheets, is that they will not fall apart in a manner similar to wax paper or paper towels. The sheets thereby provide a convenient substrate for removing and disposing of chewed gum. An additional advantage of using plastic sheets is that they are readily available to consumers. In this regard, consumers can use a variety of different products for obtaining the plastic sheets of material, e.g., plastic bags that are used for lunch and storing food products.

By way of example, and not limitation, examples of the present invention will now be given:

EXAMPLE NO. 1

Chewing gum was chewed for twenty minutes and then forced into a carpet sample to create a gum crater. After aging the gum for two hours, approximately 70 to 85% of the gum cud was removed with polyethylene sheets. The gum cud was then heated with a hair blow dryer and another 10% was removed with the polyethylene sheets. The carpet was then washed with soap and water using a brush. The residue gum and carpet was treated with the polyethylene sheets again, dried with a towel, and allowed to air dry. There were small bits of gum left in the carpeting but approximately 90 to 95% of the gum was removed.

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EXAMPLE NO. 2

Control - The cud was embedded into the carpet but after aging it for two hours there was no attempt to remove it.

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EXAMPLE NO. 3

Chewing gum was again chewed for twenty minutes and then forced into an identical carpet sample as in Examples 1 and 2 to create a gum crater. After aging the gum for two hours, approximately 70 to 85% of the gum cud was removed with the polyethylene sheets. Then 1 ml of methyl salicylate was applied to the gum cud. After waiting 2 minutes, the gum was pulled again using the polyethylene sheets in a circular clockwise, then counter-clockwise motion. Soap and water was applied and then the carpet was brushed, dried with a towel, and treated with more polyethylene sheets. There was 100% gum removal in 5 minutes.

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EXAMPLE NO. 4

Chewing gum was again chewed for twenty minutes and then forced into a carpet sample to form a crater. After aging for three days, the gum cud was treated in the same way that the sample in Example 3 was treated. The only difference was that a hair dryer was used to heat the gum cud before the methyl salicylate was applied. There was 100% gum removal.

20

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Summary

The methyl salicylate was effective in removing the chewing gum cud. It is non-flammable, non-combustible, and did not cause irritation to the hands.

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EXAMPLE NO. 5

A surface cleaner, Goo Gone®, Magic American Corp., Cleveland, Ohio, containing 95% petroleum distillates, was used to remove chewing gum from carpeting. There was

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95% removal, but the deep seated gum could not be removed. The Goo Gone® instructions did not include a warning to wear gloves, yet when it was applied, it removed the oil and moisture from the hands and caused irritation. This material is flammable and combustible although there is no warning for these two attributes.

EXAMPLE NO. 6

Tru Test Heavy Duty Citrus Degreaser, Tru Test Manufacturing Co., was ineffective in removing chewing gum from carpet.

EXAMPLE NO. 7

Citrusolv®, from Texon, Cicero, IN, a flammable liquid, was also used to remove four day old chewing gum from carpet but 4-6 ml of Citrusolv® had to be used and it dissolved the adhesive which holds the backing of the carpet to the carpet fibers.

EXAMPLE NO. 8

The following Tables (I-III) set forth test results of the present invention vis-a-vis other methods of attempting to remove chewed gum from a variety of materials.

TABLE I
Removal of 4 Different Gum Residues with 6 Treatments
from 65% Polyester/ 35% Cotton White Cloth

TREATMENT	SPEARMINT GUM 3 DAY OLD CUD	CINNAMON GUM 2 DAY OLD CUD	SPEARMINT GUM	GRAPE BUBBLE GUM 3 DAY OLD CUD
5 2 HOUR FREEZER	10% REMOVAL. 90% WITH DIFFICULTY & REMOVES LAYER OF FABRIC.	90% REMOVAL	90% REMOVAL	90% REMOVAL + PURPLE STAIN. FABRIC ADHERES TO CUD WHEN REMOVED.
ROOM TEMP.	WILL NOT PEEL OFF.	WILL NOT PEEL OFF.	PEELS OFF WITH DIFFICULTY	95% REMOVAL +PURPLE STAIN
10 METHYLACETYL RICINOLEATE* (2 MINUTE TREATMENT)	10% REMOVAL + OIL STAIN NOT REMOVED WITH WASH	-	-	100% REMOVAL + OIL STAIN NOT REMOVED WITH WASH

5	METHYL SALICYLATE* (OIL OF WINTERGREEN) (2 MINUTE TREATMENT)	100% REMOVAL, NO STAIN LEFT AFTER WASH. DUPLICATED	100% REMOVAL, NO STAIN LEFT AFTER WASH.	100% REMOVAL, NO STAIN LEFT AFTER WASH.	100% REMOVAL, NO STAIN LEFT AFTER WASH.
10	AMYL SALICYLATE* (2 MINUTE TREATMENT)	90% REMOVAL+ ODOR AFTER WASH/DRY.	100% REMOVAL+ ODOR AFTER WASH+DRY	-	-
15	OIL OF CLOVE* (EUGENOL) (2 MINUTE TREATMENT)	20% REMOVAL	100% REMOVAL+ ODOR AFTER WASH+DRY	-	-

*Turned cloth inside out applied on opposite side of gum cud.

Summary of Results:

Freezing works for most gums but can cause damage to the cloth and can leave a color stain. Methyl salicylate removes 100% cud (peels right off after 1-2 minutes of treatment) and washes off with slight wintergreen odor. Best chemical for this fabric.

TABLE II
Removal of Spearmint Cuds From 3 Fabrics - Results

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TREATMENT	WHITE 65% POLYESTER /35% COTTON 3 DAY OLD CUD	WHITE 65% POLYESTER /35% COTTON 3 HOUR OLD CUD	DARK BLUE 100% ACRYLIC CLOTH 1 DAY OLD CUD	100% COTTON DISH TOWEL WITH COLORED FLOWER PRINT 1 DAY OLD CUD
2 HOUR FREEZER	10% REMOVAL	NIL REMOVAL	90% REMOVAL WITH STAIN+ REMOVAL OF FIBERS	NIL REMOVAL WITH SERIOUS CLOTH DAMAGE
ROOM TEMPERATURE	NIL	NIL	NIL	NIL
METHYL SALICYLATE* (2 MINUTE TREATMENT)	100% REMOVAL, NO STAIN LEFT AFTER WASH.	100% REMOVAL, NO STAIN LEFT AFTER WASH.	100% REMOVAL, NO STAIN LEFT AFTER WASH.	100% REMOVAL, NO STAIN LEFT AFTER WASH. SOME COLOR BLEEDING- CHEAP FABRIC FOR DRYING DISHES.

*Turned cloth inside out applied on opposite side of gum cud.

Summary of Results:

Methyl salicylate completely removes gum cud residues from synthetic and synthetic/cotton blends without undesirable effects cheap fabrics might experience some bleeding. Freezing can damage fabric upon removal of cud and should not be recommended for cud removal. Cud age (over 3 days) does not effect methyl salicylate effectiveness.

TABLE III

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Household and Commercial Gum Residue

Removers on 3 Day Old Spearmint

Cud on 65% Polyester/35% Cotton White Fabric

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TREATMENT	RESULT
WESSON® CANOLA OIL	2 MINUTES - NO REMOVAL. 10-20 MINUTES - 50% CUD REMOVED WITH DIFFICULTY. 90 MINUTES - REMAINING CUD REMOVED WITH DIFFICULTY. LEFT GREEN YELLOW STAIN NOT COMPLETELY REMOVED WITH OIL SMELL AND STAIN/PEEL ON CLOTH AFTER WASHING.
SMUCKER'S PEANUT BUTTER	INEFFECTIVE OVER 60 MINUTES. NO REMOVAL.
"GOO GONE®" MAGIC* AMERICAN CORP., CLEVELAND, OHIO 44122	2 MINUTES - 100% REMOVAL EXCEPT FOR GREEN YELLOW COLOR STAIN FROM CUD. COLOR DOES NOT COMPLETELY WASH OUT. CONTAINS PETROLEUM DISTILLATE, CLASSIFIED AS FLAMMABLE BASED ON GC-MS DETERMINED COMPOSITION. FLASH POINT ESTIMATED AT 120 F, MEETS DOT REQUIREMENT OF FLAMMABLE.

5	"SPOTO® MULTIPURPOSE SPOT & STAIN REMOVER"* MARK ENTERPRISES P.O. BOX 3094 NEWPORT BEACH, CA 92663	2 MINUTES - 100% REMOVAL. CONTAINS BUTYL CELLOSOLVE, CLASSIFIED AS FLAMMABLE BASED ON GC-MS DETERMINED COMPOSITION. FLASH POINT ESTIMATED AT 141 F, MEETS DOT REQUIREMENT OF FLAMMABLE.
10	"TAG OFF!®"* ELANTEC INC. GOLDEN, CO 80401 303-278-7672	2 MINUTES - 100% REMOVAL EXCEPT FOR GREEN YELLOW COLOR STAIN FROM CUD. COLOR DOES NOT COMPLETELY WASH OUT.

*Turned cloth inside out applied on opposite side of gum cud.

EXAMPLE NO. 9

Spearmint chewing gum and cherry cola bubble gum were chewed for 20 minutes, pressed onto a white cloth (65% polyester/35% cotton), and allowed to sit for four days. A liniment containing 30% methyl salicylate was placed onto the opposite side of where the cud was adhered. Heat was applied with a hair blow dryer for 30 seconds. The gum cud peeled off and the area was washed with a soap and water solution and then air dried. There was 100% gum removal. The liniment is non-flammable and non-combustible.

Summary of Results:

Common household ingredients are ineffective (Peanut Butter or canola oil) or are much less effective than methyl salicylate. Freezing as noted before can be damaging to fabric. Commercial removers ("Goo Gone®", "Spoto®") work well but either fail to remove all color and/or have flammability/combustibility problems. Note that oil of wintergreen has a flash point at 230°F and is

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considered non-hazardous by the United States Department of Transportation (DOT).

5 It should be understood that various changes and modifications to the presently preferred embodiments described herein will be apparent to those skilled in the art. Such changes and modifications can be made without departing from the spirit and scope of the present invention and without diminishing its attendant advantages. It is therefore intended that such changes
10 and modifications be covered by the appended claims.

I CLAIM:

1. A method for removing chewed gum from a surface to which it is attached comprising the steps of:
contacting the chewed gum with a composition
5 including methyl salicylate; and
removing the chewed gum.
2. The method of Claim 1 wherein the composition includes at least 10% methyl salicylate.
3. The method of Claim 1 wherein the composition
10 comprises 100% methyl salicylate.
4. The method of Claim 1 including the step of using a flexible sheet of plastic to remove the chewed gum.
5. The method of Claim 1 including the step of
15 attempting to remove as much chewed gum as possible from the surface and wetting a remaining residue chewed gum portion with methyl salicylate.
6. The method of Claim 5 including the step of using a flexible plastic sheet of material to remove the
20 chewed gum before wetting the remaining residue chewed gum portion with methyl salicylate.
7. The method of Claim 6 wherein the flexible plastic sheets are constructed from at least one material chosen from the group consisting of:
25 low density polyethylene; low density polyvinyl chloride; and low density polypropylene.
8. The method of Claim 1 including the step of removing the chewed gum by applying a twisting motion to the chewed gum.
- 30 9. The method of Claim 1 wherein the chewed gum is allowed to contact the methyl salicylate for at least one minute before the chewed gum is removed.

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10. The method of Claim 1 wherein the entire surface of the chewed gum is wetted with methyl salicylate.

5 11. The method of Claim 1 wherein the surface is carpeting.

12. A method for removing chewed gum from a surface comprising the steps of:

attempting to remove at least a portion of the chewed gum from the surface;

10 contacting a residue portion of the chewed gum on the surface with a methyl salicylate containing composition; and

removing the residue portion of the chewed gum from the surface.

15 13. The method of Claim 12 wherein a flexible sheet of plastic is used to remove the chewed gum from the surface.

20 14. The method of Claim 12 wherein the entire surface of the residue portion of the chewed gum is wetted with methyl salicylate.

15. The method of Claim 12 wherein the composition includes at least 10% methyl salicylate.

25 16. The method of Claim 12 wherein the chewed gum is allowed to contact the methyl salicylate for at least one minute before the chewed gum is removed.

17. A method for removing chewed gum from a surface to which it is attached comprising the steps of:

using a flexible sheet of plastic to remove at least a portion of the chewed gum from the surface;

30 wetting a residue portion of the chewed gum with methyl salicylate; and

using a flexible sheet of plastic to remove the residue portion of the chewed gum from the surface.

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18. The method of Claim 17 wherein the same flexible sheet of plastic is used to remove the at least portion of the chewed gum and the residue portion.

5 19. The method of Claim 17 wherein the chewed gum is allowed to contact the methyl salicylate for at least one minute before the chewed gum is removed.

20. The method of Claim 17 wherein the surface is a fabric.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US94/07342

A. CLASSIFICATION OF SUBJECT MATTER IPC(5) : B08B 3/00, 7/00 US CL : 134/38, 40, 42; 252/89.1 According to International Patent Classification (IPC) or to both national classification and IPC		
B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) U.S. : 134/38, 40, 42; 252/89.1 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) Please See Extra Sheet.		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US, A, 4,306,989 (Motsenbocker) 22 December 1981	1-20
A	US, A, 5,080,821 (Lutringer) 14 January 1992	1-20
Y	US, A, 5,250,211 (Motsenbocker) 05 October 1993. See the abstract and Cols. 1 and 2.	1
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/> See patent family annex.		
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"E" earlier document published on or after the international filing date	"Y"	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
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Date of the actual completion of the international search 07 SEPTEMBER 1994	Date of mailing of the international search report 01 NOV 1994	
Name and mailing address of the ISA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231 Facsimile No. (703) 305-3230	Authorized officer  RICHARD DEAN Telephone No. (703) 305-3020	

INTERNATIONAL SEARCH REPORT

International application No.

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B. FIELDS SEARCHED

Electronic data bases consulted (Name of data base and where practicable terms used):

APS Search

Chewed Gum, Methyl Salicylate, Removing, Gum, 134/1-42/cc1st, Salicylate, Fabric, Carpet, Surface, 134/Clas, 252/clas, Wetting,