US 20230371726A1

(19) **United States**

(12) **Patent Application Publication** (10) **Pub. No.: US 2023/0371726 A1**

Huang et al. (43) **Pub. Date: Nov. 23, 2023**

(54) **CUP HOLDER WITH A LIDDED SLEEVE**

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(21) Appl. No.: **17/803,324**

(22) Filed: **May 17, 2022**

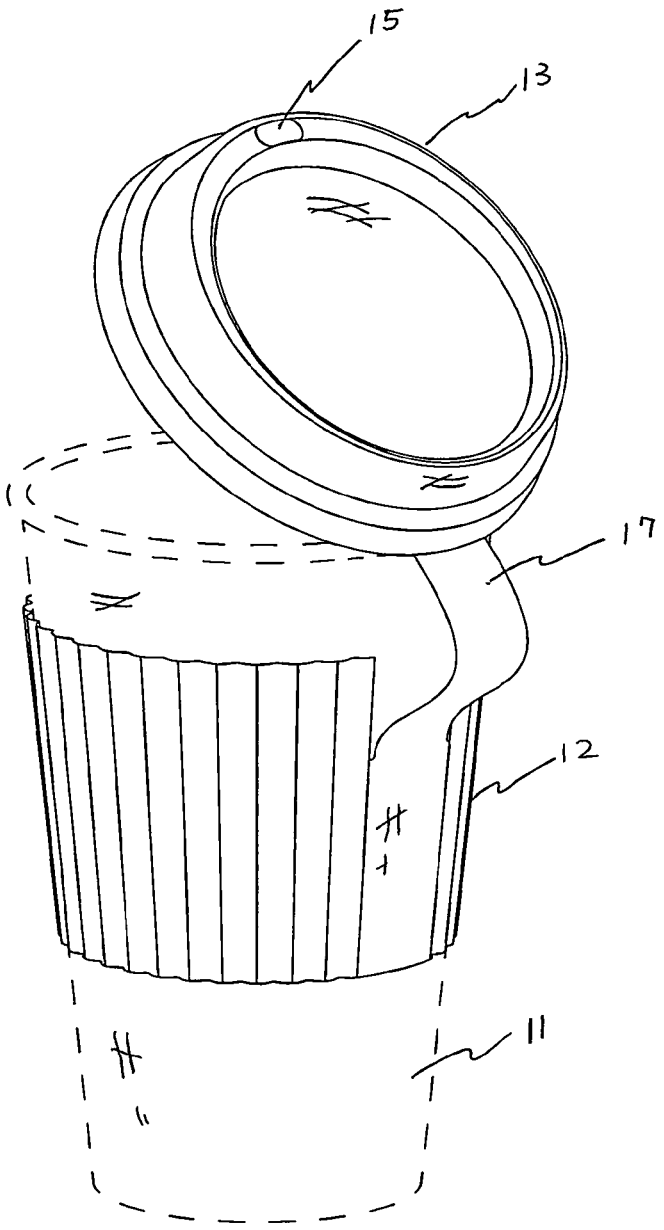
Publication Classification

(51) **Int. Cl.**
A47G 23/02 (2006.01)
B65D 55/16 (2006.01)

(52) **U.S. Cl.**
CPC ***A47G 23/0233*** (2013.01); ***B65D 55/16*** (2013.01)

(57) **ABSTRACT**

A hot holder system comprises a holder and a lidded-sleeve component. The lid-sleeve as an integrated component encourages users, after consumption, to dispose of the lid-sleeve together so that the plastic lid will be less likely to separate from the sleeve and become a nuisance waste for years.



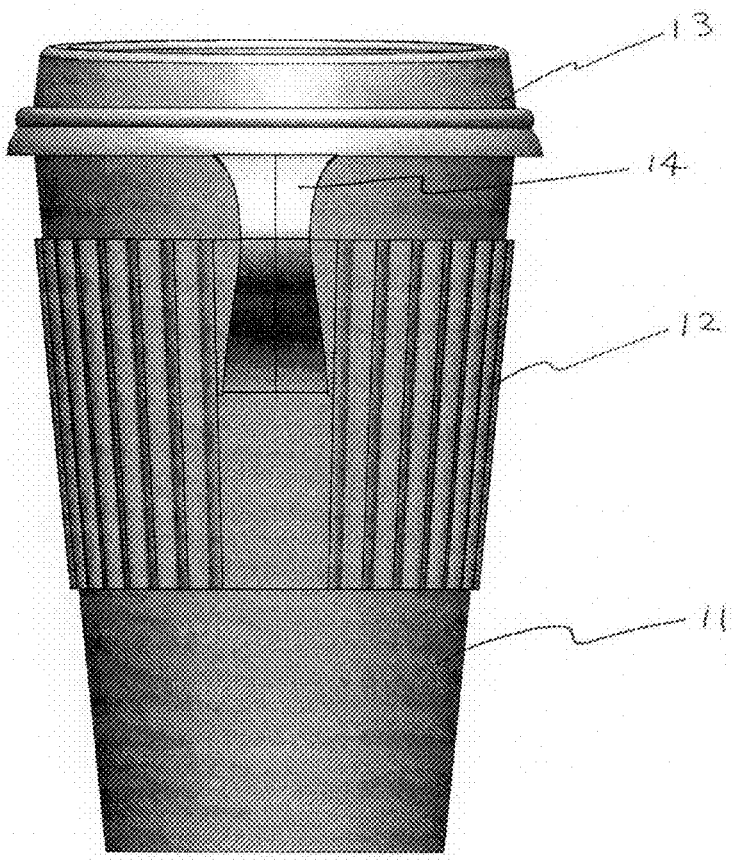


Figure 1

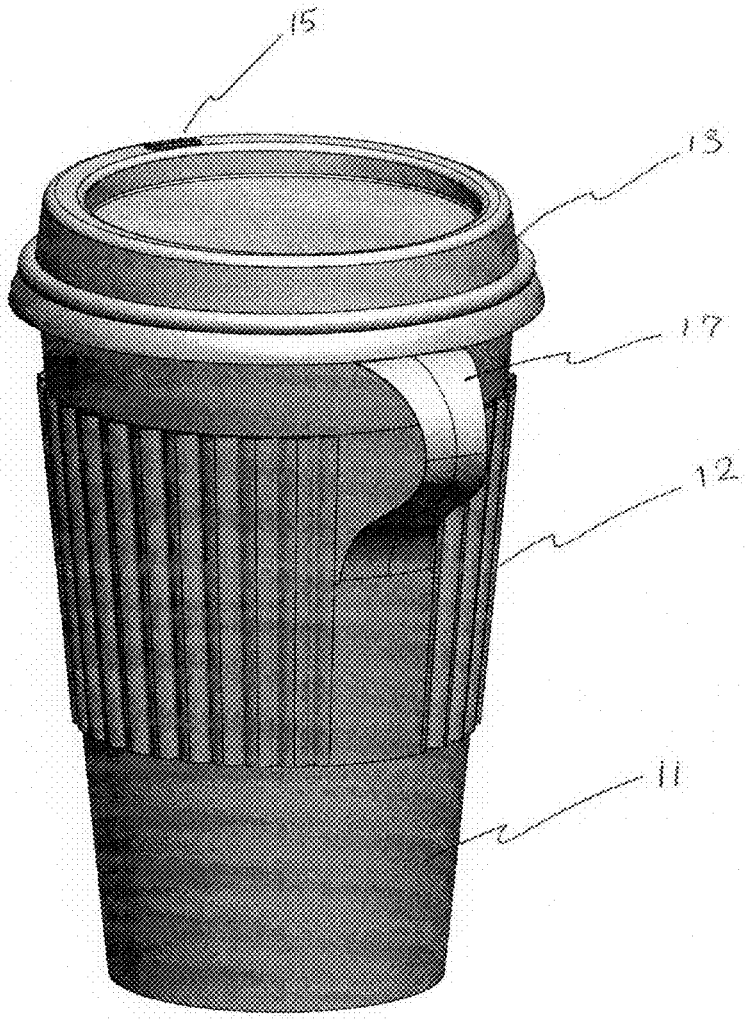


Figure 2

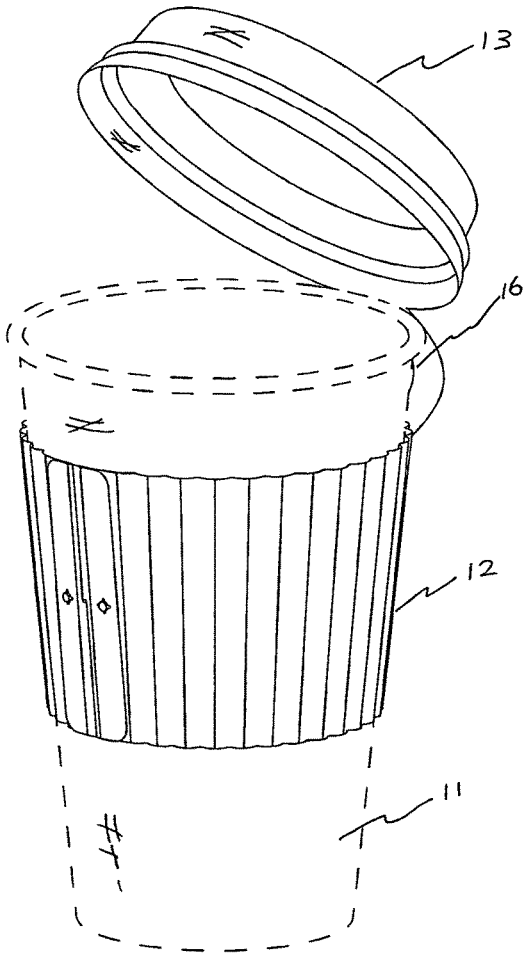


Figure 3

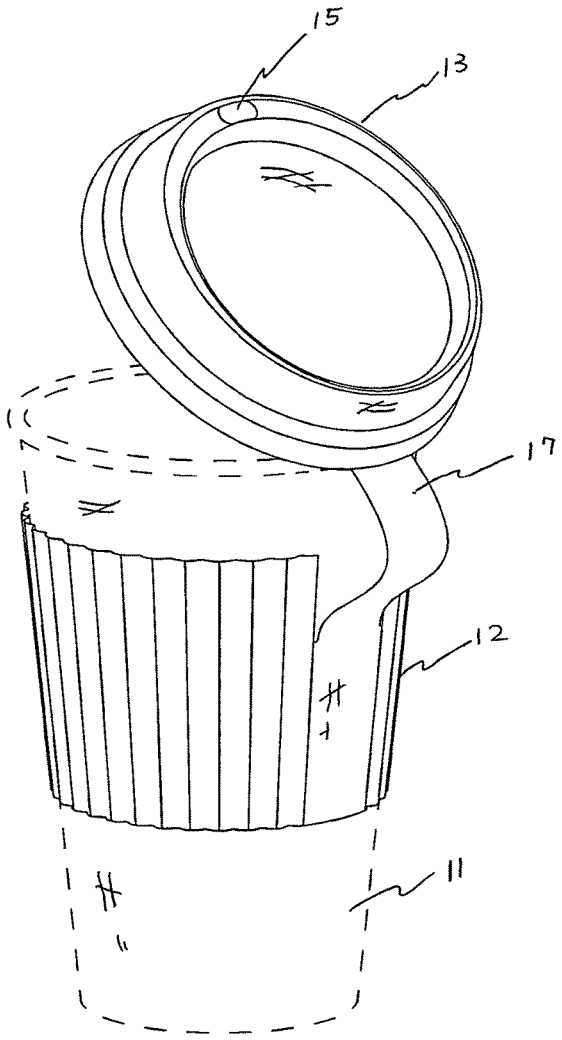


Figure 4

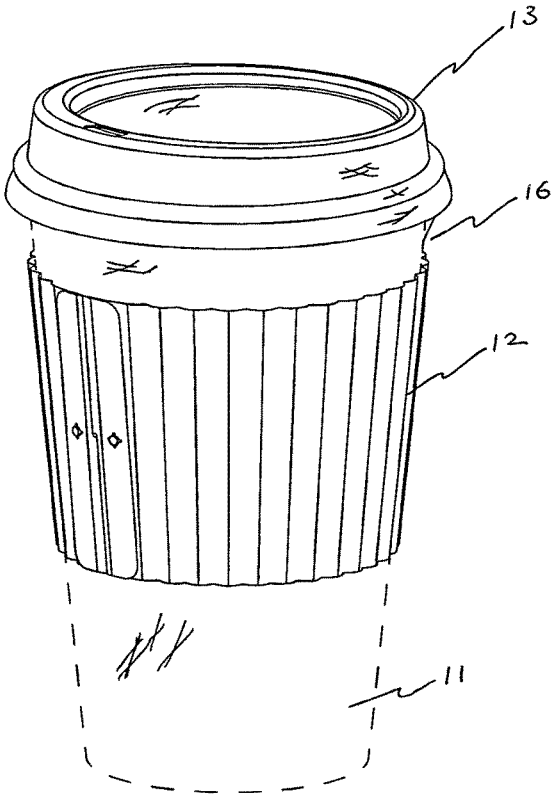


Figure 5

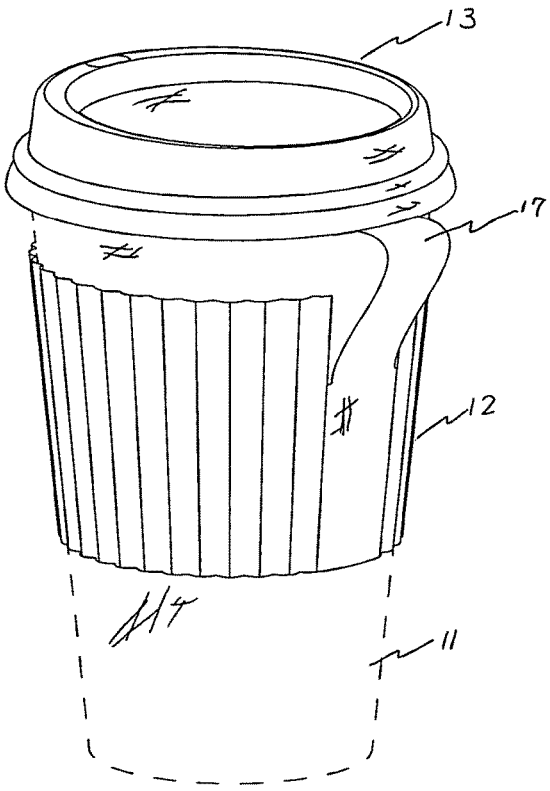


Figure 6

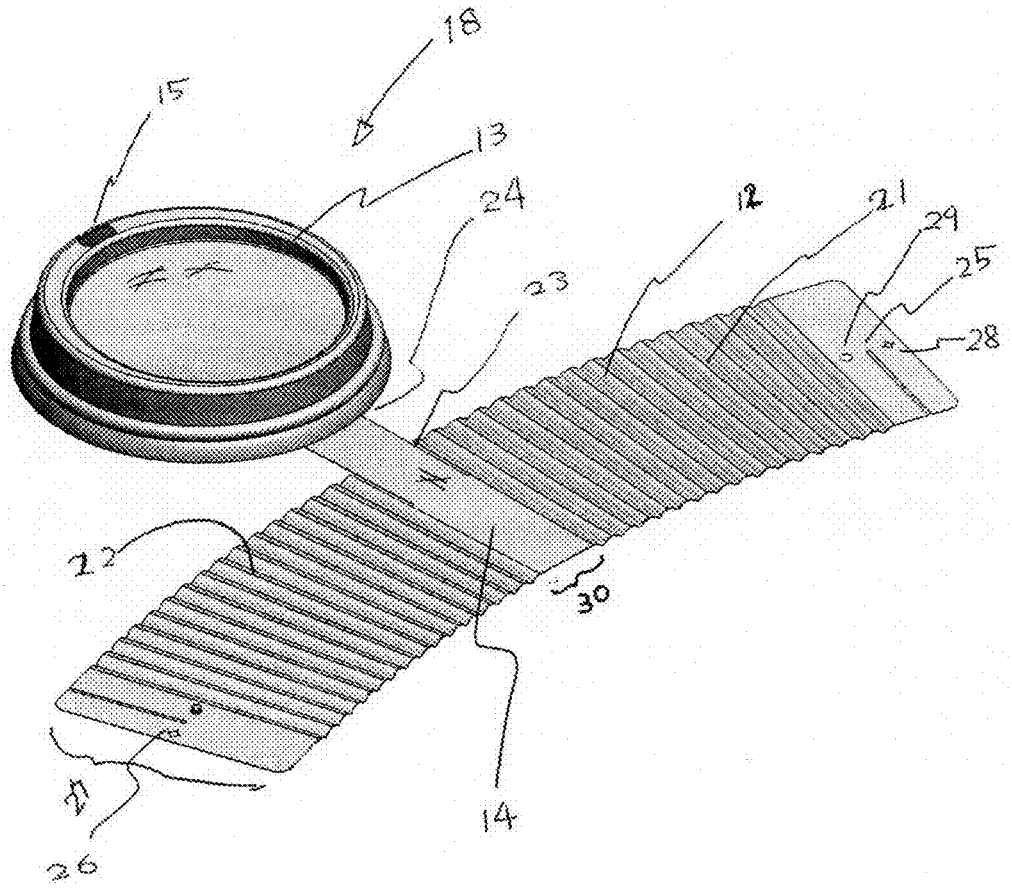


Figure 7

CUP HOLDER WITH A LIDDED SLEEVE

FIELD OF THE INVENTION

[0001] The present invention relates generally to an apparatus for use in the commercial food industry or for personal use. More particularly, the present invention relates to a hot cup holder with a lid-sleeve having a sleeve to mitigate excess high heat exposure at the holder surface and a lid to cover the holder. The lid-sleeve comprises a removable plastic lid that can be firmly and securely attached onto a sleeve via a connecting means forming as one integrated component, wherein the lid-sleeve can be disposed of probably along with the holder to minimize the plastic lid being discarded unintentionally alone by separating from the sleeve. That would cause an environment waste issue of having discarded plastic lids.

BACKGROUND OF THE INVENTION

[0002] Now in general market of the hot coffee drinking world; people mostly get used or adapted to a disposable paper cup with a plastic lid. Since our invention provides a lid with a sleeve in one entity as one integrated component, a user/drinker will not lose the lid after opening the cup with one hand since the lid is attached to the holder sleeve. The user/drinker also does not need to use another hand to hold the lid when or after filling up the coffee, since the lid is part of the lid-sleeve as one piece component.

[0003] The lid used in coffee or tea drinking should be disposed of properly by, for example incineration or other destructive means. Instead, we found many lids scattered around the seashore, roadside, or the parks. It is suggested that once the lid and the sleeve are associated as one body, people would more likely throw them away to a waste container probably along with the empty holder, which altogether can be incinerated or treated properly later. This invention presents a means for improving the environment issue by reducing the used plastic lids scattering or spreading out. Our new device design provides the drinker benefits and convenience of automatically offering the sleeve to insulate his hot coffee holder because a lid is provided as part of the lidded-sleeve component.

[0004] The lidded-sleeve component in one body with a joining means could probably be made by one sheet press stamp mold manufacturing. The sleeve sheet could be a plastic sheet or corrugated cartoon thick paper sheet. An alternate method may be to staple, button-up, or glues both ends of the sleeve sheet to form a desired holder sleeve.

SUMMARY OF THE INVENTION

[0005] It is one object of the present invention to provide a cup holder with a lid-sleeve. In some embodiment of an improved cup lid (such as for coffee cup, tea cup, food cup, or other hot beverage cup) with insulated sleeve, the cup lid and the insulated sleeve are secured together as one component via a proper connecting means.

[0006] Some aspects of the invention provides a holder system to mitigate excess heat exposure at the holder surface comprises: the holder and a lidded-sleeve component, wherein the lidded-sleeve component comprises a plastic lid that is firmly and securely attached onto a sleeve via a connecting means, wherein the lidded-sleeve component is disposable of to minimize the plastic lid alone, while being separated from the sleeve, being discarded randomly that causes an environment issue. The lid of the lidded-sleeve component is compatible to match the open mouth of the holder.

[0007] Some aspects of the invention provides a holder system comprising the holder and a lidded-sleeve component, wherein the sleeve comprises an outer surface and a thermally resistant, textured inner surface configured to encompass the holder.

[0008] Some aspects of the invention provides a holder system comprising the holder and a lidded-sleeve component, wherein the sleeve portion of the lidded-sleeve component spans along a circumference of the holder.

[0009] Some aspects of the invention provides a holder system comprising the holder and a lidded-sleeve component, wherein the sleeve comprises a paper, cardboard, or other less heat-conductive material.

[0010] Some aspects of the invention provides a holder system comprising the holder and a lidded-sleeve component, wherein a first end of the sleeve is locked or glued onto a second end of the sleeve to form a cylindrical continuous sleeve. In still some aspect of the invention it provides a holder system comprising the holder and a lidded-sleeve component, wherein a first end of the sleeve with a male button is locked onto a second end of the sleeve having a female button to form a cylindrical continuous sleeve.

[0011] Some aspects of the invention provides a holder system comprising the holder and a lidded-sleeve component, wherein the sleeve comprises a handle extended outwardly.

[0012] Some aspects of the invention provide a holder system comprising the holder and a lidded-sleeve component, wherein the sleeve comprises silicone rubber, plastic, or reused clean paper.

[0013] Some aspects of the invention provides a holder system comprising the holder and a lidded-sleeve component, wherein the sleeve is for a generally cylindrical holder.

[0014] Some aspects of the invention provides a holder system comprising the holder and a lidded-sleeve component, wherein the sleeve comprises thermally resistant, textured inner surface being corrugated, checkered, or configured with a mesh to intimately surround the holder.

[0015] Some aspects of the invention provide a holder system comprising the holder and a lidded-sleeve component, wherein the lid is with a sip hole for drinking.

[0016] Some aspects of the invention provides a holder system comprising the holder and a lidded-sleeve component, wherein the lid is made of a solid plastic material intimately or appropriately matching the open end of the holder in order to keep the content material in the holder from spilling out.

[0017] Some aspects of the invention provides a holder system comprising the holder and a lidded-sleeve component, wherein the sleeve encompasses the holder relatively firmly.

[0018] Some aspects of the invention provides a holder system comprising the holder and a lidded-sleeve component, further comprising identifying the producer or vendor of the sleeve or the holder via a mark, emblem, or logo.

[0019] Some aspects of the invention provides a holder system comprising the holder and a lidded-sleeve component having a connecting means, wherein the connecting means is a strip, wire, or a strong thread.

[0020] Some aspects of the invention provides a holder system comprising the holder and a lidded-sleeve compo-

nent having a connecting means, wherein the connecting means comprises a flat, thin sheet of material.

[0021] Some aspects of the invention provides a holder system comprising the holder and a lidded-sleeve component having a connecting means, wherein the connecting means is flexibly or manually.

[0022] Some aspects of the invention provides a holder system comprising the holder and a lidded-sleeve component having a connecting means, wherein the connecting means is adapted to lay flatly several holder systems in storage or on the store shelf.

[0023] Some aspects of the invention provides a holder system comprising the holder and a lidded-sleeve component having a connecting means, wherein the connecting means constitutes as an integral part for the lidded-sleeve component.

[0024] Some aspects of the invention provides a holder system comprising the holder and a lidded-sleeve component having a connecting means, wherein the lidded-sleeve component is manufactured by a press stamp heated mold in a one-step process.

[0025] Some aspects of the invention provides a method of mitigating an issue of discarding a removable plastic lid of a holder comprises: firmly and permanently joining the lid with the sleeve of the holder; wherein the joining step comprises a connecting means of gluing, welding, hot compressing and so on, wherein the lidded-sleeve component can be disposed of to minimize the plastic lid alone being separated from the sleeve and discarded randomly that causes an environment issue.

BRIEF DESCRIPTION OF THE DRAWINGS

[0026] Additional objects and features of the present invention will become more apparent and the disclosure itself will be best understood from the following Detailed Description of the Exemplary Embodiments, when read with reference to the accompanying drawings.

[0027] FIG. **1** shows one embodiment of the present invention, including the holder and the lid-sleeve having a relatively straight connecting means.

[0028] FIG. **2** shows another embodiment of the present invention, including the holder and the lid-sleeve having an elongated connecting means.

[0029] FIG. **3** shows a 3-D view of one embodiment of the present invention, whereas the lid-sleeve having a relatively straight connecting means.

[0030] FIG. **4** shows a 3-D view of one embodiment of the present invention, whereas the lid-sleeve having an elongated connecting means.

[0031] FIG. **5** shows a perspective view of one embodiment of the present invention, whereas the lid-sleeve having a relatively straight connecting means.

[0032] FIG. **6** shows a perspective view of one embodiment of the present invention, whereas the lid-sleeve having an elongated connecting means.

[0033] FIG. **7** shows a perspective view of one embodiment of the present invention, whereas the sleeve portion of the lid-sleeve having a relatively straight connecting means, and whereas at both ends of the sleeve, when extended and unconnected, have connecting mechanisms to form a cylindrical sleeve compatible to surround the holder.

DETAILED DESCRIPTION OF THE INVENTION

[0034] The preferred embodiments of the present invention described below relate particularly to an apparatus and a preparation method of the improved apparatus having two basic components: a holder **11** and a lid-sleeve **18**. Upon putting two components together, it forms a beverage cup with insulated sleeve **12** like a normal conventional beverage cup we used often. The holder is defined herein as any circular container with a close bottom end and a slightly larger upper open end. The holder can be made of any paper, plastic, metallic material, combination thereof, or the like.

[0035] The "lidded-sleeve component" or "lid-sleeve" **18** is defined herein to one component that comprises a holder lid **13**, a sleeve **12**, and a connecting means **14** to firmly and securely connect or join the holder lid and the sleeve together as one body or component, wherein the connecting means comprises a flat, thin sheet of material. Alternatively, the connecting means is a strip, wire, a strong thread, or the like. Both terms of "lidded-sleeve component" or "lid-sleeve" are used interchangeably in this invention. The connecting means **14** has a length about long enough to connect the lid and the sleeve; sometimes, it is with a little extra length so the connecting means will not buckle. The connecting means **14** has a width **30** compatible to provide a secure means to secure and form connecting the lid and the sleeve.

[0036] The cup or holder lid is preferably compatible to fit appropriately the holder of this invention. As used in this application, the "sleeve sheet" is intended to mean the sleeve before forming a continuous "cylindrical sleeve". The continuous sleeve of the invention spans along a circumference of the holder relatively intimately. In other words, the "sleeve" in this invention means a continuous cylindrical sleeve **12** that is compatible for the holder.

[0037] As shown in FIG. **7**, the sleeve **12** of the invention has a distal end **25** and a proximal end **26**. An upper part of the distal end **25** has a partial slit (about half length of the sleeve width **27**) and the lower part of the proximal end **26** has a partial slit (about half length of the sleeve width). In one embodiment, the half slit of the distal end **25** and the half slit of the proximal end **26** can interlock to form a cylindrical shape (continuous sleeve length) with about the similar diameter of the holder so to slip onto the holder for heat insulation purposes. In another embodiment, the interlock method of the distal and the proximal end of the open sleeve piece can be formed by matching a male **28** at one end of the sleeve sheet and a female buttons **29** at an opposite of the sleeve sheet (FIG. **7**) or other conventional methods. In still another embodiment, the distal end and the proximal end can be glued, stapled, and so forth to form a cylinder sleeve thereafter.

[0038] FIG. **1** shows one embodiment of the present invention, including the holder and the lid-sleeve having a relatively straight connecting means **16**. Furthermore, FIG. **3** shows a 3-D view while FIG. **5** shows a perspective view of the cup holder with a lid-sleeve for better appreciation of the invention.

[0039] FIG. **2** shows one embodiment of the present invention, including the holder and the lid-sleeve having a relatively elongated flexible connecting means **17**. Furthermore, FIG. **4** shows a 3-D view while FIG. **6** shows a perspective view of the cup holder with a lid-sleeve for better appreciation of the invention.

[0040] The "connecting means" is defined herein, but not limited to, to any solid flexible material that is used to firmly and securely connect a first part of the holder lid and a second part of the sleeve together. For illustration purposes in FIG. **7**, the one contact part **23** of the connecting means **14** is on a lid or cover for the holder, while the other contact part **24** of the connecting means **14** is on the sleeve. Typically, the connecting means is a strong piece or sheet or thin elongated matter of material that could be made of paper, plastic, cloth, metallic material, combination thereof, or the same. The sleeve sheet (before forming a cylindrical sleeve) could be a plastic sheet, corrugated cartoon thick paper sheet, or other less heat conductive material.

[0041] The method for making a one-piece connecting material can be one of any conventional manufacturing means, such as sheet press stamp hot forming mold, gluing, compressing using superglue, and so forth that are known to one skilled in the art.

[0042] The lid of holder cup is made of a solid plastic material compatibly and/or intimately matching the holder top in order to keep the content material in the holder from spilling out. The lid of the present invention is removable from the holder. In another embodiment, the lid has a sip hole **15** for user to drink coffee from the holder.

[0043] A holder system to mitigate excess heat exposure at the holder surface comprises: the holder and a lidded-sleeve component, wherein the lidded-sleeve component comprises a removable plastic lid that is firmly and securely attached onto a sleeve via a connecting means, further comprising identifying the producer or vendor of the sleeve or the holder via a mark, emblem, or logo.

[0044] The sleeve **12** comprises one important item of the current invention. The sleeve has an outer surface **21** and a thermally resistant, textured inner surface configured to encompass the holder. the sleeve spans along a circumference of the holder. The sleeve encompasses the holder relatively firmly. In another optionally embodiment, the sleeve comprises a handle extended outwardly. In still another embodiment, it is disclosed that the sleeve comprises silicone rubber, plastic, reused clean paper, or the same.

[0045] The sleeve **12** is one important item or component of the current invention. The thermally resistant, textured inner surface of the sleeve is corrugated, checkered, or configured with a mesh to intimately surround the holder.

LIST OF REFERENCE NUMERALS

[0046] The following list of reference numerals is provided to facilitate an understanding and examination of the present disclosure and is not exhaustive. Provided it is possible to do so, elements identified by a numeral may be replaced or used in combination with any elements identified by a separate numeral. Additionally, numerals are not limited to the descriptors provided herein and include equivalent structures and other objects possessing the same function. **11** cup, **12** sleeve, **13** lid, **14** a connecting means between the cup and the sleeve, **15** a sip hole on the lid, **16** a straight connecting means, **17** an elongated flexible connecting means, **18** lidded-sleeve component, **21** an outer surface for the sleeve, **23** and **24** are joining areas or spots of the connecting mean at opposite ends, **25** and **26** are joining points for forming the cylindrical sleeve, **27** sleeve width, **28** and **29** are male and female button joining points for forming the cylindrical sleeve at opposite ends of the sleeve sheet, **30** is the width of the connecting means between the lid and the sleeve.

[0047] Although the present invention has been described with reference to specific details of certain embodiments thereof, it is not intended that such details should be regarded as limitations upon the scope of the invention except as and to the extent that they are included in the accompanying claims. Many modifications and variations are possible in light of the above disclosure.

What is claimed is:

1. A cup holder system to mitigate excess heat exposure at the holder surface comprises: the holder and a lidded-sleeve component as one integral component, wherein the lidded-sleeve component comprises a removable plastic lid that is firmly and securely attached onto a sleeve of the holder via a connecting means, wherein the lidded-sleeve component is disposable of to minimize the plastic lid being discarded alone that causes an environment issue.

2. The cup holder system of claim **1**, wherein said sleeve comprises an outer surface and a thermally resistant, textured inner surface configured to encompass a circumferential surface of said holder securely.

4. The cup holder system of claim **1**, wherein the sleeve spans along a circumference of the holder appropriately.

5. The cup holder system of claim **1**, wherein the sleeve comprises a paper, plastic, or cardboard material.

6. The cup holder system of claim **5**, wherein the sleeve is a sleeve sheet before forming the continuous sleeve, and wherein a first end of the sleeve sheet is being locked, glued or buttoned onto a second end of the sleeve sheet to form a cylindrically continuous sleeve loop that enables spanning along a circumference of the holder.

7. The cup holder system of claim **1**, wherein the sleeve comprises a handle extended outwardly.

8. The cup holder system of claim **1**, wherein the sleeve material is selected from a group consisting of silicone rubber, plastic, and reused clean paper.

9. The cup holder system of claim **1**, wherein the sleeve is compatibly fit for a generally cylindrical holder, wherein the holder comprises a holder, hot soup holder, hot food holder, hot container, and so forth.

3. The cup holder system of claim **2**, wherein the thermally resistant, textured inner surface of the sleeve is corrugated, checkered, or configured with a mesh to intimately surround and hold the holder securely.

10. The cup holder system of claim **1**, wherein the lid is with a sip hole for convenient drinking.

11. The cup holder system of claim **1**, wherein the lid is made of a solid plastic material intimately and appropriately matching an open top area of the holder in order to keep the content material in the holder from spilling out.

12. The cup holder system of claim **1**, wherein the sleeve encompasses the circumferential surface of the holder relatively firm.

13. The cup holder system of claim **1** further comprising identifying a producer or vendor of the sleeve or the holder via a mark, emblem, or logo.

14. The cup holder system of claim **1**, wherein said connecting means is a strip, wire, or a strong thread.

15. The cup holder system of claim **1**, wherein said connecting means comprises a flat, thin sheet of material.

16. The cup holder system of claim **15**, wherein said connecting means is flexible.

17. The cup holder system of claim **16**, wherein said connecting means is adapted to lay several holders as a collecting system in stack.

18. The cup holder system of claim **1**, wherein said connecting means become the integral part for the lidded-sleeve component.

19. The cup holder system of claim **18**, wherein the lidded-sleeve component is manufactured by a press stamp heated mold in a one-step process.

20. A method of mitigating an issue of discarding a removable or detachable plastic lid of a cup holder comprises: firmly and permanently joining the plastic lid with a sleeve of the holder; wherein the joining step. comprises a connecting means of gluing, welding, hot compressing and so on, wherein the lidded-sleeve component can be disposed of to minimize the plastic lid alone being separately from the sleeve and/or discarded randomly that causes an environment issue.

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