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(71) Applicant: KiMs A/S 5471 Søndersø (DK)

(72) Inventor: Nystrøm Jepsen, Iris 5792 Årslev (DK)

(74) Representative: Mikkelsen, Hans Kristian Saaby et

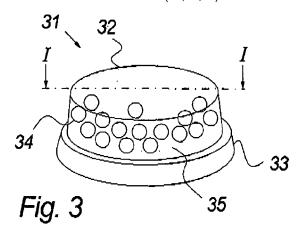
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Patentgruppen A/S Arosgaarden Aaboulevarden 31 8000 Aarhus C (DK)

#### (54) Lid package of snap-on lids

(57) The invention relates to a lid package (10,20) comprising a plurality of snap-on lids (11,21,31) for use with beverage containers (71). Each lid of said plurality

of snap-on lids comprising a primary section (32,52,62) and a covering (46,56,66), a confectionery being sealed between said primary section (32,52,62) and covering (46,56,66).



EP 2 380 821 A1

#### **FIELD OF THE INVENTION**

**[0001]** The invention relates in general to packages of container closures and more particularly with a lid package of snap-on lids for beverage containers.

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#### **BACKGROUND OF THE INVENTION**

**[0002]** At public events such as sport, concerts or the like, large amounts of beverage, hot dogs, confectionery and the like are sold on the spot to complete the overall experience for the people attending.

**[0003]** In order to facilitate easy serving and disposal afterwards, beverage is typically served in annular walled paper or plastic containers which can be disposed after finishing drinking.

**[0004]** An advantage of the application of such general-purpose beverage containers which may be filled upon the choice of the consumer on the spot is that many different types of drinks can be served using only few different, e.g. three sizes, containers. Furthermore these containers can be used even when the assortment of beverages varies and storage of those is easy since they can be easily stacked.

**[0005]** A problem related to serving beverage in such containers will be known to anyone who has ever been at such public events, namely that during transportation of the beverage from the beverage stand to ones seat or spot, it is very likely that part of the beverage is spilled on the ground or on people in the, often quite dense, crowd.

**[0006]** An obvious solution to this problem would be to use a lid such as known from e.g. fast-food restaurants, whereby the beverage could be kept in the container until reaching ones seat or spot. Such lids are disclosed in a number of documents, such as US 4,194,645.

[0007] A probable reason why such lids are seldom used may be that the use of such lids will result in further expenses to the organizer both when buying the lids and when cleaning after the event. In comparison to the fast-food restaurants, at e.g. outdoor-concerts, it is not a problem to the organizer when beverage is spilled on the ground and hence the use of such lids is not attractive.

**[0008]** A further problem arises if the consumer needs to carry further items, when a walking distance to his spot or seat may be several hundreds of meters. When trying to carry more than one object in each hand, difficulties may arise.

**[0009]** The present invention is concerned with these problems, and accordingly, it is an object of the present invention to provide solutions to these.

#### **SUMMARY OF THE INVENTION**

**[0010]** The invention relates to a lid package comprising a plurality of snap-on lids for use with beverage con-

tainers, each lid of said plurality of snap-on lids comprising a primary section and a covering, said lid comprising a fastening arrangement for mounting said lid on a beverage container, wherein said fastening arrangement is adapted to snap-on over a top opening of a beverage container, wherein said top opening is annular with a diameter of more than 4 cm; wherein said covering is mounted on said primary section to seal a confectionery container formed between said primary section and said covering, wherein said covering is adapted to enable easy opening to the confectionery container by the consumer, and wherein said confectionery container comprises a confectionery.

**[0011]** With a package of snap-on lids according to the present invention, lids and confectionery bags are combined into one and the same part which may be easily transported in a package to a desired place of use which may be e.g. at sports or concerts. At the desired place the snap-on lids may be individually sold together with beverages as explained here below. Hereby a number of advantages are obtained.

**[0012]** In the beverage stand, one size of lid may be sold with a number of different confectioneries, each one of which will fit to the rather limited number of sizes of beverage containers, often just one size. Hereby a consumer may combine any available beverage with any available confectionery.

**[0013]** A consumer buying both a beverage and a hotdog may fancy a confectionery as well; however with only two hands it may be difficult to carry also a confectionery as a walking distance to ones spot or seat may be several hundreds of meters. When such confectionery can simply be attached in the form of a lid, it will be much easier for the consumer to carry and hence he should not worry about transport.

**[0014]** Furthermore a consumer who maybe not totally fancy a confectionery as well, may anyway be easily convinced to pay extra to get a lid to cover his beverage while at the same getting some sweet or salty confectionery, which anyway could please his friends if not the consumer himself.

**[0015]** Furthermore the amount of waste may be reduced in that there is no need for both a confectionery bag and a lid; instead these are combined into one item. Consequently, when covered with a lid according to the present invention, the beverages may be covered with a lid without causing more waste or additional expenses to the organizer.

**[0016]** Consequently, with the packages of snap-on lids according to the present invention, it is believed that an increased sale of confectionery at i.a. sports and concerts may be the result, while at the same time the spill from the beverages combined with these lids will be lessened.

**[0017]** In an embodiment of the invention, said lid package comprising a plurality of snap-on lids for use with beverage containers with an open end and capable of being stacked into each other.

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**[0018]** In a preferred embodiment of the invention the beverage containers to be used according to the present invention should be containers with an open end, such as disposable plastic or cardboard cups, capable of being stacked into each other. Hereby is facilitated that a large number of empty cups may be positioned in one stack without taking up much room, the lid package according to the present invention may be positioned next to it, and thereby improved conditions for selling beverages is obtained as compared to e.g. keeping stacks of bottles of soft drinks.

**[0019]** In an embodiment of the invention, said lid package comprises at least 3, preferably at least 5, such as at least 10 or 20 lids.

**[0020]** In an embodiment of the invention, said lid package comprises a box of e.g. cardboard or a bag of e.g. plastic.

**[0021]** A number of different materials may be used for gathering lids into lid packages. The important issue is that they can be transported regardless of which material or shape is being used.

**[0022]** In an embodiment of the invention, said primary section is form-stable.

**[0023]** Preferably the primary section is quite form-stable even though some flexibility may be desired in order to fit on the top of beverage containers. Typically it may be produced by moulding or any other suitable process known in the art.

**[0024]** In an embodiment of the invention, said covering is formed of an easily flexed material, preferably said covering comprises at least one film or foil selected from the group of metal foils, polymer films, metallized or coated films, polymer sealants, polyesters, polyamides and polyolefines comprising polyethylenes and polypropylenes or any combination thereof.

**[0025]** In an embodiment of the invention, said covering is mounted on an upward or downward facing side of the snap-on lid, when said lid is positioned in the intended position on a beverage container.

**[0026]** In a first preferred embodiment, the covering is on the upper side of the lid, thereby facilitating the possibility of opening and consuming the confectionery while the lid is still on the beverage container.

**[0027]** In a second preferred embodiment, the covering is on the lower side of the lid, thereby facilitating improved strength of the assembly of lid and container during transport.

**[0028]** In an embodiment of the invention, said covering facilitates a controlled atmosphere within said confectionery container.

**[0029]** When said covering is mounted on said primary section to seal a confectionery container formed between said primary section and said covering, it is possible to obtain a sealed room for a controlled atmosphere, which may be desired for various confectioneries in order to prolong shelf life.

**[0030]** The term controlled atmosphere will be known to the skilled person to indicate the possibility of control-

ling e.g. humidity, amount of Nitrogen, etc.

**[0031]** In an embodiment of the invention, the volume of said confectionery container is above 10 cm<sup>3</sup>, preferably above 20 cm<sup>3</sup>, such as above 40 cm<sup>3</sup>.

[0032] In an embodiment of the invention, said fastening arrangement comprises a peripheral skirt.

**[0033]** It is noted that said fastening arrangement is preferably a downwardly outwardly extending peripheral skirt.

[0034] In an embodiment of the invention, said top opening is annular with a diameter of more than 5 cm, preferably more than 6 cm, such as more than 7 cm.

**[0035]** In an embodiment of the invention, said lid comprises an opening in order to let a straw pass through the lid without penetrating the confectionery container.

[0036] In various embodiments the lid may be combined with the possibility of using a straw with the beverage while the lid is mounted on the container. In a first embodiment a through-hole is established through both the primary section and the covering, whereby a straw may be inserted whenever desired. In a second embodiment an opening is established in the primary section and may be turned into a through-hole either by removing the covering or by pushing the straw through the covering.

[0037] In an embodiment of the invention, said lid comprises a mechanism to allow drinking directly from the container while the lid is mounted on the container. This embodiment may advantageously be combined with the embodiment where the confectionery container can be opened from the top and the confectionery can be consumed with the lid on.

**[0038]** In an embodiment of the invention said primary section and/or said covering is made in a visually transparent material.

**[0039]** In an embodiment of the invention, said confectionery is a snack. The snack could be a dry salty snack such as peanuts, potato chips or the like, a sweet or a savory snack. In further embodiments of the invention, said confectionery is a combination of snacks selected from the group consisting of salty, sweet and savory snacks.

**[0040]** In an embodiment of the invention, said covering comprises printed text and/or graphics.

45 [0041] In a further advantageous embodiment of the present invention, the covering is used as a background for printed text and/or graphics, which e.g. could be a commercial for the manufacturer of the confectionery. In another preferred embodiment, a logo of a sports club could be printed, which would be very suitable for home teams at sport events.

**[0042]** In an embodiment of the invention, said covering is adapted to enable easy opening by comprising a slip in said covering.

[0043] According to various embodiments of the invention, the covering may comprise both a single and/or a multi-layer structure. If multi-layered, the layers may be laminated, mutually welded, or generally gathered.

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**[0044]** In an embodiment of the invention, said fastening arrangement comprises a plurality of adjacent inwardly directed semi-spheres for fastening said lid to a beverage container.

**[0045]** Said fastening arrangement may take various forms such as preferably a peripheral skirt; in a preferred embodiment, the skirt is provided with a plurality of circumferentially spaced radially inwardly directed semispheres to abut an upper rim of the beverage container. Hereby the lid is adapted to close the container while the semi-sphere construction simultaneously provides for a degree of limited circumferential expansion so as to accommodate possible minor manufacturing dimensional tolerances in the container.

**[0046]** In another embodiment, the skirt may be equipped with inwardly projected flexible and deformable detents for yieldably engaging under the curl of a beverage container in a manner for removably securing the closure on the container.

**[0047]** In an embodiment of the invention said beverage container is disposable, thereby facilitating use at e.g. concerts or sports. The beverage container may be formed from any suitable material such as thermoformed plastic sheet, treated paper and the like, and may be suitable for the containment of various comestibles and the like including hot or cold liquids.

**[0048]** In an embodiment of the invention said lid is adapted to fit a disposable beverage container for containing a beverage with a viscosity being substantially the same as for water.

**[0049]** In an embodiment of the invention said lid is adapted to be mounted immediately after buying.

**[0050]** Moreover the invention relates to a snap-on lid according to any of the claims 1-11 for use with a beverage container.

**[0051]** Moreover the invention relates to the use of a snap-on lid according to any of the claims 1-11 as a lid on a beverage container.

**[0052]** Moreover the invention relates to a method of combining a beverage and a confectionery comprising the steps of:

- choosing a beverage between one or more possibilities:
- choosing a confectionery between one or more possibilities;
- pouring said beverage into a beverage container;
- mounting a snap-on lid according to any of the claims
   1-11 comprising said confectionery on said beverage container.

**[0053]** Moreover the invention relates to a portable beverage and confectionery assembly, comprising: a disposable beverage container comprising a top opening; and a confectionery container comprising a bottom opening sealed with a covering facilitating a closed confectionery container; said confectionery container comprising a peripheral skirt adapted to form a releasable lid over

said top opening of said beverage container; wherein said top opening is circular with a diameter of more than 4 cm; wherein said covering comprises opening means for easy opening to the confectionery by the consumer:

#### **BRIEF DESCRIPTION OF THE DRAWINGS**

[0054] The invention will now be described with reference to the drawings, of which

fig. 1-2 illustrate different lid package embodiments,

fig. 3 illustrates a snap-on lid,

fig. 4 illustrates a cross-section of the lid of fig. 3 at the line I-I,

fig. 5-6 illustrate different embodiments of snap-on lid.

fig. 7 illustrates the snap-on lid of fig. 3 and 4 mounted on a beverage container, and

fig. 8 illustrates an advantage of the snap-on lid.

#### **DETAILED DESCRIPTION**

**[0055]** With the present invention, as described in the following, it is believed that an increased sale of confectionery at i.a. sports and concerts may be the result, while at the same time the spill from the beverages combined with these lids will be lessened.

**[0056]** In order to be able to transport the lids to the venues, the lids are packed into a lid package according to embodiments of the present invention. Hereby the lids may be packed immediately upon production and easily be stored for sale at beverage stands or the like.

**[0057]** At e.g. some sports events beer can be tapped at a front table and bags with snacks can be taken from boxes on a rear table. With the present invention the lid packages according to the present invention can simply replace the boxes of traditional snack bags and be used with the advantages as described in this specification.

**[0058]** Fig. 1 and 2 illustrate different lid package embodiments, in fig. 1 is shown a box 10 comprising 56 snap-on lids 11 in each layer. Obviously within the scope of the invention, each box may comprise several layers with any number of lids and may be stacked sideways or ontop of each other. In fig. 2 is shown a bag 20 comprising 10 snap-on lids 21 stacked on top of each other.

[0059] Both box and bag may be manufactured in any appropriate material, for the box typically some kind of cardboard and for the bag typically some kind of plastic.

[0060] Fig. 3 illustrates a snap-on lid 31 in more detail. A number of individual pieces of confectionery 34 is positioned in the confectionery container 35 formed between the primary section 32 and the covering, which is not shown in this fig. but can be seen from fig. 4. The lower part of the primary section 32 comprises a fastening arrangement in the form of a peripheral skirt 33 adapted to snap-on over a top opening of a beverage container. No specific means for performing a snap function is indicated in the figure, however most often some spatial

pattern will be present in the peripheral skirt 33 in order to improve the snap-function.

**[0061]** Fig. 4 illustrates a cross-section of the lid of fig. 3 at the line I-I, where again is seen a number of individual pieces of confectionery 34 positioned in the confectionery container 35. In this cross-section it can be seen that the confectionery container 35 is formed between the primary section 32 and the covering 46. The covering 46 comprises a bended portion, a slip 47, to enable easy opening to the confectionery container by the consumer.

[0062] Variations of the embodiment of fig. 3 and 4 are illustrated in figs. 5-6. The lid of fig. 5 differs from the lid of fig. 4 by having a primary portion 52 providing the lower bound of the confectionery container, whereas the covering 56 with corresponding slip 57 in this embodiment provides the upper bound of the confectionery container. [0063] A further embodiment is shown in fig. 6; the lid of fig. 6 differs from the lid of fig. 5 in that an opening 68 is present in the primary portion 62 but that a covering 66 is still present to enable a controlled atmosphere in the confectionery container. By penetrating the covering 66 by inserting a straw through the opening 68, the beverage may be consumed with the lid still on the beverage container and before opening to the pellets of confectionery 64. Obviously this embodiment may be varied with opening size, opening position, expanse of covering, etc. [0064] Fig. 7 illustrates a cross-section of the snap-on lid 31 of fig. 3 and 4 mounted on a beverage container, here a disposable plastic cup 71, containing a beverage 73. The peripheral skirt 33 of the primary section fits on the outside of an annular rim 72 on the top of the disposable plastic cup 71. As explained other places in this specification, the peripheral skirt 33 will most often be equipped with a spatial pattern to improve the fitting between the beverage container and the lid.

**[0065]** Fig. 8 illustrates a further advantage of the present invention. Typically one lid is taken at a time from a package of lids, when one beverage is being sold. Typical lids for beverage containers such as the one disclosed in US 4,194,645 are closely stacked on top of each others to save space. At least two problems may arise from this; first of all the lids may be difficult to separate from each other, if they are too wedged into each other. Second of all, a natural way to hold such a slim lid would be with one finger on the top side and another finger on the bottom side. Hereby a hygienic issue arises as the bottom side afterwards is mounted over a beverage which may fizz or slop and thereby get in contact with the point of finger contact.

[0066] In fig. 8 is seen that with the primary portion 82 shaped to encompass a confectionery container the sides of the lid will work as evident places to grab when handling the lid. By grapping the lid in this way as indicated with AA, no part of the lid facing the beverage when mounted on a beverage container will be contaminated. Moreover the relatively high side portions ensure that the lids are not problematically wedged into each other.

[0067] The use of the lid according to the present in-

vention aids to avoid spilling of the beverage. For this purpose, it is not necessary for the lid/container interaction to ensure a completely water-proof mounting. However, if desired, obviously such a water-proof mounting may be applied as well within the scope of the present invention.

**[0068]** It should be noted that in the present context, with the term lid is to be understood a movable cover for the opening or closing of a hollow container.

**[0069]** In the present context, with the term fastening arrangement is understood any kind of fastening means or fastener. Such a fastening arrangement may comprise any suitable measure for snapping the lid to the opening of a container. The fastening arrangement may comprise e.g. a group of mechanical element facilitating the fastening of the lid to the opening of a container. The fastening arrangement may also be completely integrated in the lid forming a continuous pattern in e.g. a peripheral skirt.

20 [0070] In the present context, with the term covering is understood a covering suitable to establish a confectionery container in combination with the primary section. In preferred embodiments this covering may be an airtight covering.

#### Claims

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- 1. Lid package (10, 20) comprising a plurality of snapon lids (11, 21, 31) for use with beverage containers (71), each lid of said plurality of snap-on lids comprising a primary section (32, 52, 62) and a covering (46, 56, 66),
  - said lid comprising a fastening arrangement (33) for mounting said lid on a beverage container, wherein said fastening arrangement is adapted to snap-on over a top opening of a beverage container, wherein said top opening is annular with a diameter of more than 4 cm;
  - wherein said covering is mounted on said primary section to seal a confectionery container (35) formed between said primary section and said covering, wherein said covering is adapted to enable easy opening to the confectionery container by the consumer, and
    - wherein said confectionery container comprises a confectionery (34, 64).
- Lid package according to claim 1, wherein said lid package comprising a plurality of snap-on lids for use with beverage containers with an open end and capable of being stacked into each other.
- 3. Lid package according to claim 1 or 2, wherein said lid package comprises at least 3, preferably at least 5, such as at least 10 or 20 lids.
- 4. Lid package according to any of the claims 1-3,

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wherein said lid package comprises a box of e.g. cardboard or a bag of e.g. plastic.

- **5.** Lid package according to any of the claims 1-4, wherein said primary section is form-stable.
- 6. Lid package according to any of the claims 1-5, wherein said covering is formed of an easily flexed material, preferably said covering comprises at least one film or foil selected from the group of metal foils, polymer films, metallized or coated films, polymer sealants, polyesters, polyamides and polyolefines comprising polyethylenes and polypropylenes or any combination thereof.
- Lid package according to any of the claims 1-b, wherein the volume of said confectionery container is above 10 cm<sup>3</sup>, preferably above 20 cm<sup>3</sup>, such as above 40 cm<sup>3</sup>
- **8.** Lid package according to any of the claims 1-7, wherein said fastening arrangement comprises a peripheral skirt (33).
- 9. Lid package according to any of the claims 1-8, wherein said top opening is annular with a diameter of more than 5 cm, preferably more than 6 cm, such as more than 7 cm.
- 10. Lid package according to any of the claims 1-9, wherein said is adapted to enable easy opening by comprising a slip (47, 57, 67) in said air-tight covering.
- **11.** Lid package according to any of the claims 1-10, wherein said fastening arrangement comprises a plurality of adjacent inwardly directed semi-spheres for fastening said lid to a beverage container.
- **12.** A snap-on lid according to any of the claims 1-11 for use with a beverage container.
- **13.** Use of a snap-on lid according to any of the claims 1-11 as a lid on a beverage container.
- **14.** Method of combining a beverage and a confectionery comprising the steps of:
  - choosing a beverage between one or more possibilities;
  - choosing a confectionery between one or more possibilities;
  - pouring said beverage into a beverage container:
  - mounting a snap-on lid according to any of the claims 1-11 comprising said confectionery on said beverage container.

15. A portable beverage and confectionery assembly, comprising:

a disposable beverage container comprising a top opening; and

a confectionery container comprising a bottom opening sealed with a covering facilitating a closed confectionery container;

said confectionery container comprising a peripheral skirt adapted to form a releasable lid over said top opening of said beverage container.

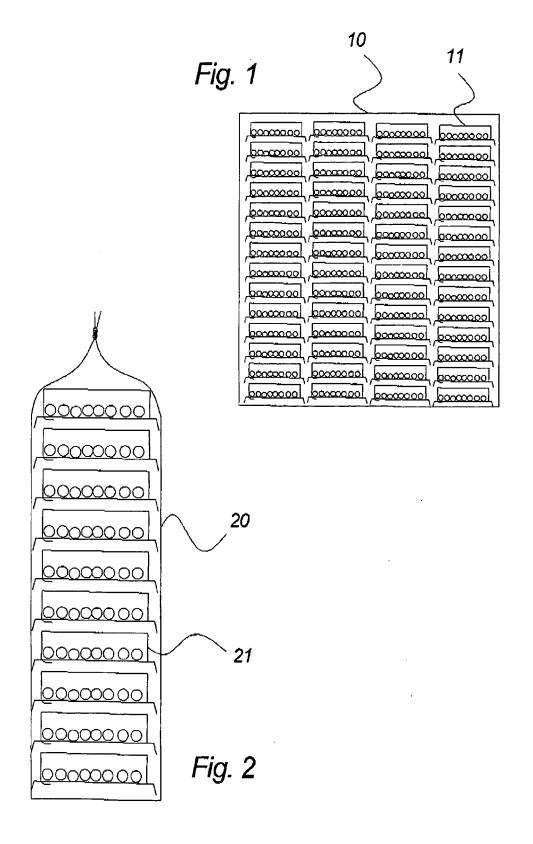
wherein said top opening is circular with a diameter of more than 4 cm:

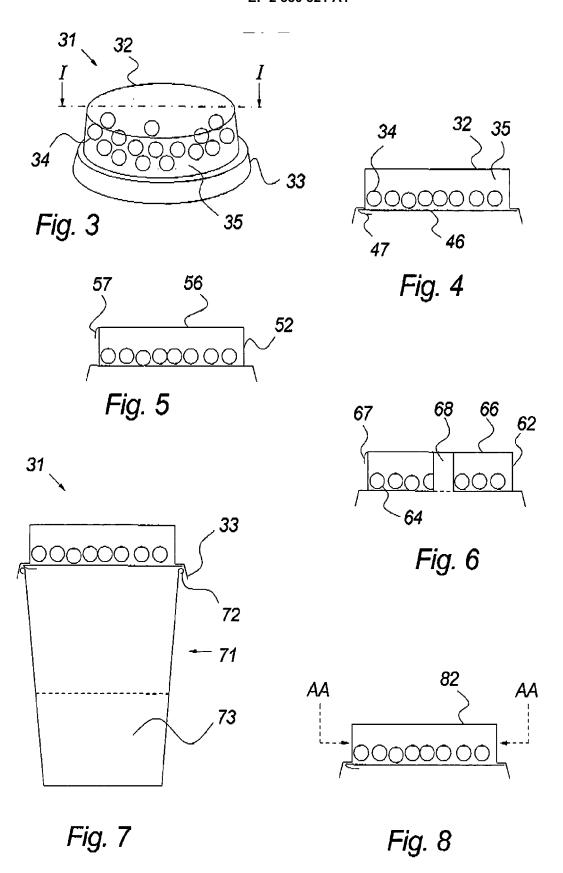
wherein said covering comprises opening means for easy opening to the confectionery by the consumer:

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## **EUROPEAN SEARCH REPORT**

Application Number EP 10 00 4215

	Citation of document with in	dication, where appropriate,	Relevant	CLASSIFICATION OF THE	
Category	of relevant passa		to claim	APPLICATION (IPC)	
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### ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 10 00 4215

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13-07-2010

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## EP 2 380 821 A1

#### REFERENCES CITED IN THE DESCRIPTION

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