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(54) Titre : CARTOUCHE DE BOISSON ET PROCEDE POUR LA FORMATION D'UNE BOISSON A L'AIDE D'UNE ASSISTANCE DE FILTRAGE
(54) Title: BEVERAGE CARTRIDGE AND METHOD FOR BEVERAGE FORMATION USING FILTER AID

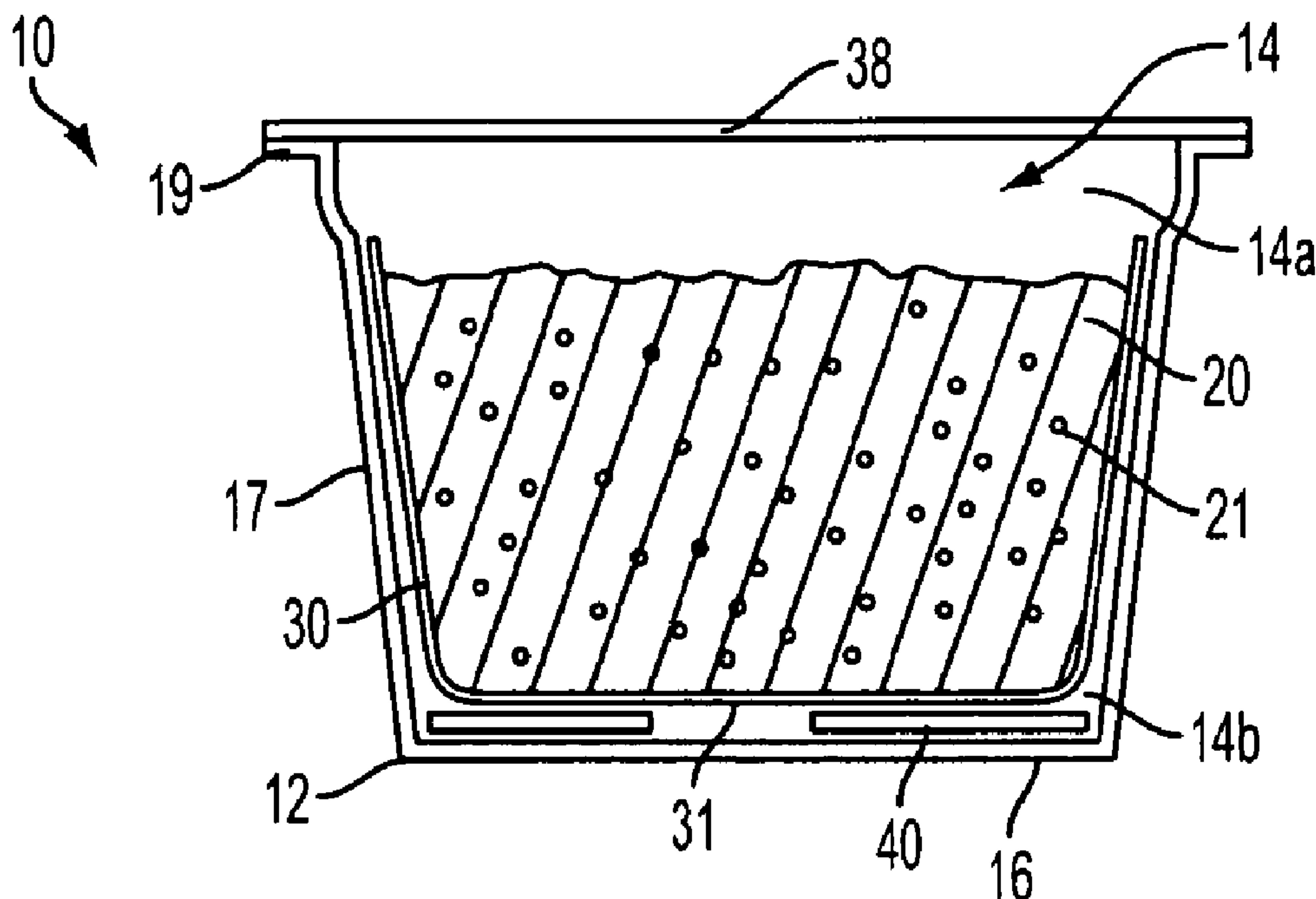


FIG. 1

(57) **Abrégé/Abstract:**

A method and apparatus for forming a beverage involves the use of a filter aid, e.g., that is provided in a beverage cartridge with a beverage medium in a dry state. In one embodiment, a cartridge including a dried fruit material may also include a filter aid, such as

(57) **Abrégé(suite)/Abstract(continued):**

perlite, diatomaceous earth or cellulose, that is mixed together with the fruit material. The filter aid may assist in flow through the beverage medium or through a filter, e.g., by helping prevent the clogging of pores of a filter used to remove particulate from a beverage formed by interaction of the beverage medium with water introduced into the cartridge. Thus, the filter aid may permit the use of some beverage media that would otherwise clog a filter and/or prevent proper dissolution of materials in the beverage media without the filter aid.

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BEVERAGE CARTRIDGE AND METHOD FOR BEVERAGE FORMATION USING FILTER AID

This application claims the benefit of U.S. Provisional application no. 61/275,398,
5 filed August 28, 2009.

BACKGROUND

1. Field of Invention

This invention relates to forming a beverage and a beverage cartridge involving the
use of a filter aid.

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2. Related Art

Cartridges for use with beverage forming machines are well known, and may include
one or more filters as well as a beverage medium, such as ground coffee beans, tea leaves, etc.
In some cartridges, a filter is located between two or more portions of an interior space of the
15 cartridge, e.g., one portion in which a beverage medium is located, and a second portion into
which liquid that has passed through the filter flows. An example of one such cartridge is
disclosed in U.S. Patent 5,840,189 and/or U.S. Patent 6,607,762, which may be used with a
beverage making machine like that described in U.S. Patent 7,398,726, which patents are
hereby incorporated by reference in their entirety. In use, the beverage forming machine
20 introduces a fluid into the cartridge to interact with the beverage medium. In some machines,
a piercing inlet needle pierces a surface of the cartridge (e.g., a portion of the cartridge
container or lid) to introduce water into the cartridge, and an outlet needle of the machine is
used to pierce the cartridge (e.g., a bottom wall of the cartridge container or a lid) permitting
the liquid that has interacted with the beverage medium to flow through the filter and exit the
25 cartridge.

SUMMARY OF INVENTION

The formation of beverages using some types of beverage media, such as dry,
powdered fruit materials, can be difficult in some circumstances. For example, when using a
30 beverage cartridge that contains a powdered fruit material to form a beverage, the inventors
have found that difficulties can arise, such as incomplete dissolution or other extraction from
the fruit material and/or clogging of a filter in the cartridge that is used to remove insoluble
particles from the beverage. That is, for example, some dried fruit materials tend to clump
and/or swell when exposed to water, preventing proper wetting of the beverage medium as

occur to those skilled in the art. Such alterations, modifications, and improvements are intended to be part of this disclosure, and are intended to be within the spirit and scope of the invention. Accordingly, the foregoing description and drawings are by way of example only.

What is claimed is:

