# BACKPACK WITH CONFIGURABLE AUXILIARY POCKETS AND COMPARTMENTS

## FIELD OF INVENTION

This invention relates to backpack and more particularly children backpacks with configurable utility pockets and compartment through the use of hook & loop fastening system.

## BACKGROUND ART OF INVENTION

The main component of a backpack comprises three main elements:
Firstly, the main body of the backpack.
Secondly, any additional external compartment or pockets that were sewn on the exterior of the backpack.
Thirdly, internal utility compartment or pockets that are sewn within the backpack.

Typically for most backpack, all three elements are fixed. Meaning external compartments and pocket, as well as internal compartments and pockets are sewn on the bag. The current format of a backpack assumes that everyone wants and needs the same level of utilities and functionalities from a backpack. It also relates to the cost of the bag since more compartments mean more cost, thus more expensive.

However, this is not the case as different people have different need and usage for a backpack. The current level of configurations that are offered in the market are limited to minor sizing and/or fitting adjustments, for example, shoulder strap length adjustments, harness length adjustments etc. Thus, it is desirable to provide a backpack that is entirely configurable to individual needs and requirements

## STATEMENT OF THE INVENTION

In accordance to the points raised, the invention is a backpack with fully configurable utility compartment in the forms of modular external compartment, pockets, holders, sleeves and even names and design, as well as internal compartment, pockets, holders, sleeves and even names and design.

This can be achieved through the usage of modular compartments that can be attached to a ‘base’ backpack using a touch-fastening hook & loop mechanism. The modular compartment includes backpack divider, compartments, pockets, holders, sleeves, design and name patches. This modular re-design and re-thinking of the backpack essentially allow for almost full functional configuration of the backpack.

Such an arrangement enable a user to configure and arrange the organization of their backpack according to their needs, requirement and preferences. By mixing and matching the various pockets and/or compartment with each other and fastening these pockets and/or compartment on to their base backpack through the hook & loop mechanism would thus result in a backpack that is entirely configurable.

This invention is likely to have a particular advantage as a children backpack. Children have different packing requirements at various stages of early child schooling. A configurable backpack would allow parents and their child to customize their backpack according to the specific needs and requirements as their child grows up.

Another aspect of advantage in having a configurable backpack is the education aspect where a parent can leverage on the self-configuration advantage of this invention to teach their child the basics of organization. Therefore, apart from fulfilling the basic needs of storing things, such an invention also doubles as a teaching tool for parents.

From the foregoing disclosure and the following more detailed description of the various embodiment, it will be apparent to those skilled in the art that the present invention provides a significant advancement in the technology of backpack. Particularly significant is the potential this invention affords for providing a personalized and customized backpack that can be customized to fit the user needs and budget. User would only pay for the functionality that he or she requires rather than a one-size-fits-all product that either lack the functionality desired or has too much features, much of which are under-utilized and costs more. Additional feature and advantage of various embodiment will be better understood in view of the drawings provided.

## BRIEF DESCRIPTION OF THE DRAWING

Fig. 1 is a front view showing a backpack with the internal lining made up of a 'loop'-type fabric that is used as part of a hook & loop system according to the present invention.

Fig. 2 is a front view of a configurable pocket that can be hooked on to the backpack according to the present invention.

Fig. 3 is a front view of a configurable pocket that can be hooked on to the backpack according to the present invention

Fig. 4 is a front view showing a backpack that is fully configured according to the present invention.

Fig. 5 is a second reference according to the present invention.

Fig. 6 is a side view showing the backpack with the part of the outer fabric lining made up of a 'loop'-type fabric that is used as part of a hook & loop system according to the present invention.

Fig. 7 is a side view showing a backpack with the external made up of a 'loop'-type fabric that has been paired with a configurable pocket lined with a 'hook' type fabric according to the present invention.

## DETAILED DESCRIPTION OF CERTAIN EMBODIMENT

Fig. 1 shows the backpack system from the front view. It comprises of the main backpack with the interior fitted with soft loop fabric at reference point 1 & reference point 2. These points would serve as the main configuration surface of this invention.

Fig. 2 shows an example of a pocket accessory which would serve as the second embodiment of the invention. The pocket comes in various size that are designed in modular sizing to allow easy configuration for the user.

Fig. 3 shows the rear view of the second embodiment. As can be seen, the rear of the pocket is fitted with horizontal and vertical rows of hook fabric at reference point 3, reference point 4, reference point 5 and reference point 6. With the fitting of the hook fabric, the pocket will be able to securely fasten onto the soft loop interior surface of the backpack. The user would also be able to easily detach and switch out the pockets with different modular options.

Fig. 4 shows the front view of the invention when the pocket accessories are connected and fastened together to form the complete backpack system. As demonstrated in Fig. 5, by changing the type of accessory that is used in conjunction with the backpack, the user is able to change the functions of the backpack.

Fig. 5 shows an alternate configuration of the backpack system to demonstrate the wide variety of configuration options that goes along with this invention.

Fig. 6 shows the external side view of the backpack. Similar to the second embodiment of the invention, for this embodiment has the external side of the backpack fitted with soft loop fabric at reference point 7. The basic function is similar to the previous example, where the user would connect a separate pocket accessory with the main backpack to complete the system.

Fig. 7 shows the external side view of the backpack that is connected with a pocket accessory via the same hook & loop fastening mechanism.

**CLAIMS**

1) A backpack system that is fitted internally and/or externally with fabric compatible with with hook & loop fastening mechanism; and auxiliary pockets, compartments and accessories; wherein the main backpack and auxiliary pockets, compartments and accessories are fitted with matching hook & loop fabric that enables the easy connection and detachment of the auxiliary pockets, compartments and accessories onto the main backpack.