



aIDEAS Fashionable Asthma Inhalers (FAI)

aIDEAS Ltd. (all Inclusive Design Enabling Access Solutions) is an assistive-technology, project-based ideas-house which combines inclusive innovation with inspiring form to provide new, holistic design solutions for the 21st century multi-age, multi-needs market. aIDEAS' design-solutions ultimately provide maximum benefit, minimum effort living.

aIDEAS rationale for FAI is the same as the justification for differently styled watches, e.g. Pop Swatch[™] watches. Wearing a watch or some jewellery that we feel compliments our style, makes us feel that we look better and consequently we feel better. Although highly functional, a stylishly designed asthma inhaler can create a **win-win** situation for both user and manufacturer:



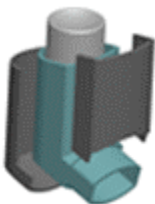
- By removing the embarrassment and stigma attached to using an inhaler in public, patient compliance is better - this is particularly relevant for paediatric medical use. Insulin injection pens have already demonstrated this successfully - not only mimicking stylish writing pens in terms of style, but also creating child-appelling colours and graphics. It is now common practice to ask which colour and style of pen device the patient would prefer.
- Manufacturers win by creating a unique device which reflects their commitment to patient wishes, and thereby increases market share.

aIDEAS has envisaged different ways of developing fashionable asthma inhalers (patent pending) which both enhance patient usability and commercialisation.



The basic inhaler shape and appearance can be adapted to appeal to varied age groups and style preferences. Preliminary concepts include union jack, camouflage or child-friendly cartoon graphics. Textures can be added to the decorative inhaler shell for blind or visually impaired patients, e.g. flexible rubber or plastic moulding to provide ridges, indents or embossing.

Plastic moulded decorative shells have been designed into child-friendly shapes, e.g. teddy-bear, bumble-bee and ladybird. The head and body of the toy can face the child and the combination of colour and style will reduce the fear of inhaler use. This has been further adapted to be a mounted plastic-moulded "clip-on" attachment fitted to the outer manufacturers shell to decorate for and calm children, whilst allowing original colour and label of inhaler to be visible.



The decorative shell is comprised of one or more pieces which assemble together around the outer. The design dimensions and materials that define the medical function of the device are maintained, so medical re-validation is not required and development costs are minimised. The workings of the inhaler are not altered: the mouth piece and the canister activation button remain free and the critical dimensions, e.g. distance from mouthpiece to patient and angle of device use relative to the patient's face remain unchanged.

The aIDEAS FAI design allows for customisation of an existing medical device using cosmetic mechanical skins. It allows for improved patient usability and compliance *via* inclusive design and accessibility principles.

Please visit www.aideas.org/fai for more information.