



## Force reducing attachment for medicinal inhaler

This device can be attached to standard medicinal inhalers (e.g. an asthma pump) to reduce the amount of force required to activate the inhaler.

Patients with respiratory ailments, such as asthma, often rely on inhalers to provide a metered quantity of medicine via the respiratory system. Experiments show that the amount of force required to activate a typical inhaler and release the medicine is around 39.2 N. This is substantially more than most children and geriatric patients are able to apply.

There are a number of modified inhalers on the market to reduce the required application force, but these devices are typically complex (e.g. electronic), expensive or non-standard. The invention is an attachment sleeve that fits over a standard inhaler to reduce the force required to activate the inhaler to about 12.26 N, which makes it manageable for most children and geriatric patients.

### Benefits

- Allows for easy activation of the inhaler, is cost effective, reusable, and is adjustable so that it can be used with a wide range of standard inhalers
- Includes a dosage counter to indicate the number of dosages delivered or that are remaining
- Designed to appeal to children and can be made to resemble a comic character such as a rabbit with ears
- Patients have the option of employing a number of different grip types to activate the inhaler, whichever is most comfortable for them

### Market

Pharmaceutical companies, pharmacies and children's hospitals

### Technical Description

The device has a body for receiving a replaceable conventional inhaler with canister and a mouthpiece. At least two symmetric levers are attached to the body and extend away from the body. The free ends of the levers are moveable towards and away from each other. An inwardly directed cam surface on each of the levers engages with the canister to dispense a dose.

#### Keywords:

MRI, patient tracking, MRI orientation, image correction

#### Intellectual Property Rights:

Britain (priority founding):  
1604709.4

#### Technology Readiness Level:

5 - Early Prototype

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