

# Martial Inventions

**Training aids and weapons abound in the martial arts, but they are constantly being improved upon and new ones being invented in backyards and gyms around the world. Could you have one worth patenting?**

**M**artial arts training devices have become popular as aids in building all the attributes required in martial arts: speed, power, hand-eye coordination, hand spacing, timing, strength ... the list goes on.

Examples of such devices include the wooden dummy (and countless variations), iron rings, clubbells, Gyrotwister, leg-stretcher and bounce-back punching bag. Some of these are ancient, others use modern materials and technology — although how effective they are will mostly depend on the person who trains with them. It is noteworthy however, that many of these devices are protected by patent law.

A patent is a right granted for any device, substance, method, or process that is new, inventive and useful. It gives the owner the exclusive right to commercially exploit the invention for the life of the patent. There are two types of patents in Australia: a standard patent, which gives long-term protection and control over the invention for up to 20 years; and an innovation patent, which is a relatively fast and inexpensive option, and lasts for a maximum of eight years.

In order to be granted a patent, the invention must satisfy certain criteria: it must apply to technology (i.e. something that is a product, a composition or a process); the technology must be new or novel and different from anything that already exists; it must be useful (i.e. have the potential for commercial return), and the invention will operate in the way in which it has been described; and finally, it must be inventive (i.e. it must be the result of some ingenuity from the inventor).

If you have invented a martial arts training device and consider it useful, then patents would certainly give effective protection, especially if it is using new methodology or technology. Many martial artists, however, also tinker around with weapons and modify them to suit their training. Many of these weapons are considered prohibited weapons, and are not in themselves easily modified. However, edged weapons like the knife open up possibilities for martial artists to create something innovative,

and thereby capable of being the sort of subject matter for a patent.

Pocket-knives used to be opened by pulling the blade out of the handle, which generally required two hands. This cumbersome approach led to innovations being employed. First, there was a slot for one's fingernails to assist in pulling out the blade, then someone invented a thumb-stud on the blade to allow for one-handed opening. This led to various new innovations, including a Spyderco patent where the user presses the pad of his thumb against a hole and opens the blade by rotating his thumb, similar to using the thumb-stud.

One of the simplest yet innovative inventions is the Wave system invented by martial artist and award-winning custom knife-maker, Ernest Emerson. His Commander knife features a hook on the spine of the blade, which, when snagged on the edge of the pocket, causes the knife to open as it is removed. A US patent was granted in 1998 for this feature. This feature was also licensed to Spyderco for use in one of its range of knives (the Waved Delica and Endura).

It should be remembered that the specifications for the invention are made public by publishing them in the Official Journal of Patents. The reason is that the

invention should be shared in exchange for monopoly rights given to the inventor. It also allows others to see how the invention works and whether or not it could be improved. When the life of the patent expires, it is likely that the successful feature will be copied and used.

In order to ensure that your invention is not lost, you must not demonstrate, sell or discuss your invention in public or publish about it before you lodge your application to the Patents' Office. If you do so, your invention will lose the 'novelty' aspect required, as it would have been deemed to be in what's known as the 'public domain'. Any discussion must take place under the cloak of confidentiality.

Whether you are using a martial arts device or weapon for training, or tinkering around with existing aids or weapons to improve them, if you were able to solve a particular problem with the old apparatus or weapon, you ought to seriously consider whether or not there is a patentable invention right in front of you.

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**A folding knife with thumb-hole opening feature**

