



Book Review

D. Guicking, Patents on Active Control of Sound and Vibration—An Overview, including a Comprehensive Patent Bibliography on CD ROM with Retrieval Program GOPI (Price € 96.00 plus postage; available at <http://www.guicking.de>).

This book and accompanying CD is the second revised and enlarged edition of an earlier CD-based patent bibliography, published in 2003, which itself has grown out of earlier paper-based reference bibliographies assembled by Dr. Guicking since 1978.

It represents a huge effort in recording and classifying the patent literature in the field of active sound and vibration control. Although no such bibliography could claim to be complete, the CD covers about 5700 patents in the field, from which the author has identified 1740 families of patents and grouped them into 17 sections. The book provides a commentary on these sections, starting with the historical patents of Coanda and Lueg and moving through algorithms, active noise control (ANC) in ducts and mufflers, ANC in interior spaces, ANC in communications, ANC for personal noise protection, ANC for domestic appliances, ANC for exterior sound, sound radiation and transmission control, other ANC applications, active flow control, active vibration control (AVC) for beams, plates and structures, AVC for buildings, AVC for rotating machines, active vibration isolation, various AVC applications and transducers. This clearly covers a lot of ground. It is understandably difficult to be clear where the boundaries lie, between active noise control and echo cancellation for example, but the commentary is informative and provides a valuable guide to the patent literature in this field.

In many fields the patent literature can appear to be only loosely coupled to the published academic literature, or sometimes even to exist in a parallel universe. Patents serve a different purpose to academic publications. The inventor publicly discloses his invention in return for exclusive rights to exploit it for a fixed period of time, about 20 years, after which the invention can be used by anyone. Patents thus provide a valuable way of learning about progress in a particular field, particularly in industrial laboratories. Patents are, however, not peer-reviewed in the same way as academic papers are. Provided the idea is new, inventive and capable of industrial application, a patent may be granted regardless of whether it will ever be useful. Also, many patents are granted that rely on earlier ideas and, in the cold light of a patent court, may not be so inventive after all. The way that patent specifications are written is also very different to most academic publications, since they are legal documents. The language can be obscure and the punctuation minimal, in case it is interpreted as adding extra meaning. It is not always in the best interests of the inventor to make clear what the most important or viable parts of the patent may be. A single good idea can get hidden in a multitude of less relevant detail by the patent lawyer. The need to cover many variations of a basic idea also tends to make patents very repetitive and they can be mind-numbingly boring to read. Any help in navigating the patent literature, such as that provided by Dr. Guicking's commentary, is thus extremely welcome.

This bibliography provides a very helpful and valuable guide to the patent literature in the field of active sound and vibration control and will be an important resource for those concerned with innovation in this field.

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