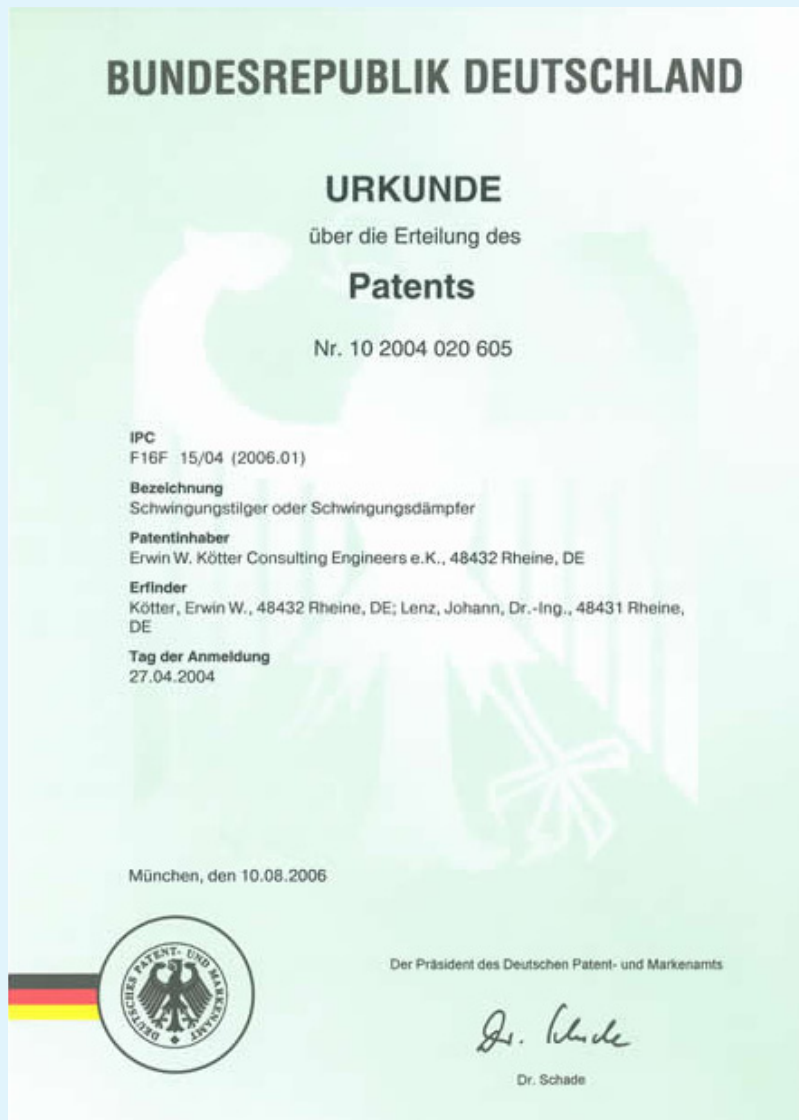


New patent granted for a vibration damper system

When increased vibrations occur at a machine, it is important to eliminate the effect of the vibration excitation. Using dampers or absorbers is a possibility. They are installed at a vibration system so that a reduction of the vibration level is reached. The responsible physical effect must be considered separately. The damper converts vibration energy into thermal energy. The absorber is an additional vibratory system that minimises vibration amplitudes at selected points in the original resonance frequency. Practical constructions of the absorber and damper are available in various designs – separate as well as combined.

Based on our practical experience, we have developed a damped absorber system for which a patent has been granted, now. Last year, we had the ultrasonic-damping-plate patented. The damped absorber can be constructed gradually. In this way, not only an absorber with absorber frequencies but with various (multi-) absorber frequencies depending on the density of the elements is created. The system can be constructed as simple absorber system (for constant speed) but also as damped absorber system by filling in a viscous fluid. This construction is used for structures (i.e. bridges, high-rise buildings, towers, ceilings of buildings) and in general mechanical engineering. Advantages of this construction can be seen especially at rotationally symmetrical components as there often appear adjacent resonances in different directions.

MACHINE DYNAMICS



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