

signal from any kind of sensor (microphone, accelerometer, intensity probe). It can also process these acoustic signals in two channels, in the time and frequency domains, and of course in real time.

Symphonie stores an audio signal like a tape recorder. It can at the same time act as a data-logging integrating sound level meter, in order to measure the noise level over time. As a frequency analyser, it also integrates the signal. These complementary functions provide

the user with a full description of the environmental noise or vibration, whether in urban noise monitoring, the measurement of noise at workstations or the acoustic monitoring of a building.

The applications of digital acoustics are increasingly diverse and they require customised systems. Based on Symphonie, **01dB** has therefore just developed a monitoring station known as Salto, which is designed for long-term monitoring of the noise environment around airports.

## patents news

# patents news

## Recent publications in the noise field

### Foamed composite panel with improved acoustics and durability

Patent number: EP1094164  
 Publication date: 25 August 2001  
 Inventor(s): C. Hallett, A. Adey, W. Fry, J. Felegi, R. Lewis *and* E. Nute  
 Application no.: EP20000122611 20001017  
 Priority no.: US19990159987P 19991018

An acoustical panel formed from a fibrous, open-celled material comprised of up to about 50% by weight fibers, between about 3% and about 10% by weight binder, between about 20% and about 75% by weight filler and about 0.01% to about 2.0% by weight surfactant. Additionally, voids are formed within the panel having an average distribution size diameter of about 50  $\mu$  m to about 250  $\mu$  m. The acoustic panel achieves very high sound absorption properties without the need for additional surface perforations, while maintaining a very high surface hardness.

### System and method FOR SPEECH recognition by aerodynamics and acoustics

Patent number: US6205425  
 Publication date: 20 March 2001  
 Inventor: Ho Kit-fun  
 Application no.: US19970953970 19971020

Speech recognition and speech commands are achieved by inputting aerodynamic component and acoustic component of a speech utterance. The aerodynamic and acoustic components are recognized by pattern matching and/or by rules. A helmet for inputting speech is also disclosed.

### Acoustic wall

Patent number: S120165  
 Publication Date: 31 August 2000  
 Inventor: Knezevic Marjan  
 Application no.: SI19980000305 19981211

This wall, which is used in the field of interior acoustics, is an independent wainscot, which is attached to walls of concert halls and other premises where musical performances are held, for example recording studios. The concave ribbed segments accept the sound and return it correctly back into the room. The sound is not reflected by walls, but circulates between the openings of the acoustic wall and the wall itself. The sound retains its original loudness and remains pure in the room with a minimum acceptable reflection. The sound audibility in the room, where the walls are covered with the acoustic wall according to the invention is quite uniform.