

Thailand IASCA Competition report!

Home AV Car AV Gaming AV

SPL!



Sony's budget 1080p projector
- the VPL-VW50



- Masterpieces -
Sinfoni



- IASCA Thailand -
Elson Lee Champion

JBL EVEREST DD66000

S\$5.00



MICA (P) 177/01/2006

Full Report on JBL Touring Sound Challenge!

THE PATH TO MUSICAL

AN INTERVIEW WITH GIANNI BORINATO

Pathos (from paschein, the Greek word meaning "to suffer" or "emotion") is one of the three modes of persuasion in rhetoric (along with ethos and logos). Pathos appeals to the audience's emotions. It is a part of Aristotle's philosophies in rhetoric.

In rhetoric, pathos is the use of emotional appeals to alter the audience's judgment. A common use of pathos in argument is creating a sense of rejection if the audience doesn't agree. Creating a fear of rejection is in essence, creating a pathos argument. Extracted from Wikipedia

Gianni has an interesting resume – graduated in Italy's second oldest University (Padua University circa 12th century, nothing less and hence garners a certain respect), plays guitar (he's got a collection) with friends on a semi professional basis, qualified DIY audio-phile (made his own amplifier), industrial designer (electronics). A recipe for a new hifi electronics company?

Gianni of Pathos loves our weather here, 'its too cold in Italy now'. He actually likes humidity? We go and stay in your house in Italy in winter and you can stay in mine in Singapore every December, I told myself! Well it seems Pathos is based in Vincenzo, northern Italy where another famous Italian loudspeaker manufacturer is based in – Sonus faber. Do they make good bedmates? Darn forgot to ask. Then this isn't about bedroom stories...

Anyway, Gianni if you did not know by now, is Pathos. Together with two other partners – Paulo and Gaetano have built a company with its own proprietary technology – INPOL. We'll come to that later.

GB: I worked for industrial – designing electronics to drive machinery. As a hobbyist, I built my own amplifier, a home amplifier and one for the car. In '91 I have an idea to make a new kind of amplifier – to combine tube and solid state. One tube will amplify the signal and an output stage with no amplification. Typically, tube amplifiers deliver lots of voltage and need transformers to drive speakers without destroying them. Output transformers have high output impedance, is difficult to design to work well for wide frequency response. It usually cannot control bass well. My idea is to replace the transformer



with a device with no gain, to deliver only current hence it will have low output impedance. This is the essence of INPOL. INPOL does not need feedback but it is limited to relatively low power, about 30 watts that is enough to drive typical speakers.

During a holiday period in '93, I had time to make a working sample for an amplifier and I brought it to a friend of mine, Gaetano who had a hifi shop. He is an expert in listening! So I left it

EMOTION

OF PATHOS ELECTRONICS

there and I went for vacation. A few days later I called him to ask for his opinion. Gaetano's response was, the sound was so unusual and he heard something he never heard before. One of Gaetano's customer - a piano teacher, obviously an expert in listening, ask for an audition and was surprised - he had never heard string and mechanical of a piano sound so alive!

Gaetano suggested that I should contact a hifi magazine, he introduced a friend who is working in one and arrange for a meeting where the amplifier was loan to them for a week. Their impression was the amplifier was something special. And I should consider making them commercially available.

I was in a dilemma, should I (1) Patent and sell the design? (2) Start factory and built it.

Gaetano liked the idea of producing the amplifier but the looks of the amplifier needs professional help. That's where Paulo came into the picture. Paulo is also a musician and an established industrial designer. Three of us started the company Pathos, started the factory and now the company owns the patent.

The first product that came out in '94 was called the Twin Towers, you know why if you look at the design! It won numerous awards in Italy. After 9-11 we decided to change its name to TT for obvious reasons.

SPL!: What does INPOL stand for?

GB: INseguitore POmpa Lineare or in English - Linear Pump Follower.

SPL!: You mentioned about the limitations of INPOL eg its low power...

GB: To derive more power, we developed the Double INPOL, the second INPOL is used in reverse phase. (See picture) with double INPOL the distortions are cancelled out and the amplifier develops high power - about 90 watts with around 0.1% distortion. It maintains

full balanced using a double triode.

SPL!: The Endorphin CD player is quite an amazing looking player.. expensive though!

GB: The Endorphin attempts to build the best sounding player we can. It has the best mechanism we can buy - the Philips PRO2, it uses the best DACs - the Crystal 24-bit and oversamples at 192 kHz with balanced output and the digital filter is in constant linearity and in phase. The tube used is a double triode and uses the same INPOL technology. Of course it runs pure Class A. To get the best performance, run in balanced. If used in non-balanced, an Analogue Devices I/C will combine the +ve and -ve rails to retain all the information.

SPL!: What new products will be shown in CES 2007?

GB: We will have a cheaper CD player than the Endorphin (9000 €) probably around half the price to match the Classic One and the Logos amplifiers. The new Mono blocs will also be shown - 150 watts pure Class A using double INPOL.



The original amplifier Gianni built