

Medical School

University of Sao Paulo - USP

Otorhinolaryngology Department

Professor and Chairman: Ricardo Ferreira Bento





Silvio Penteado. E.E., PhD

## Hearing Aids to Attend to Public Policies in Brazil: From Academia to Patient's Ear

Pretoria, 30th May - 01st June, 2012

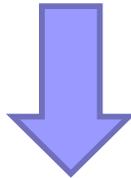


# Legislation

Ordinance 587/589 (October 2004).

Hearing aids, ENT, AUD, Social Assistance, Psychiatrist, exams.

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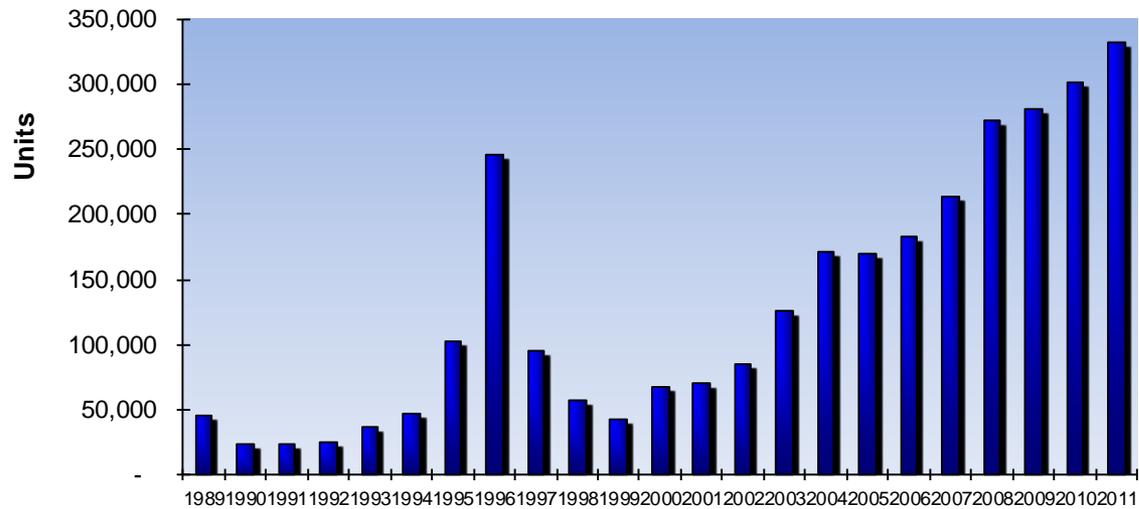


**FOR FREE**



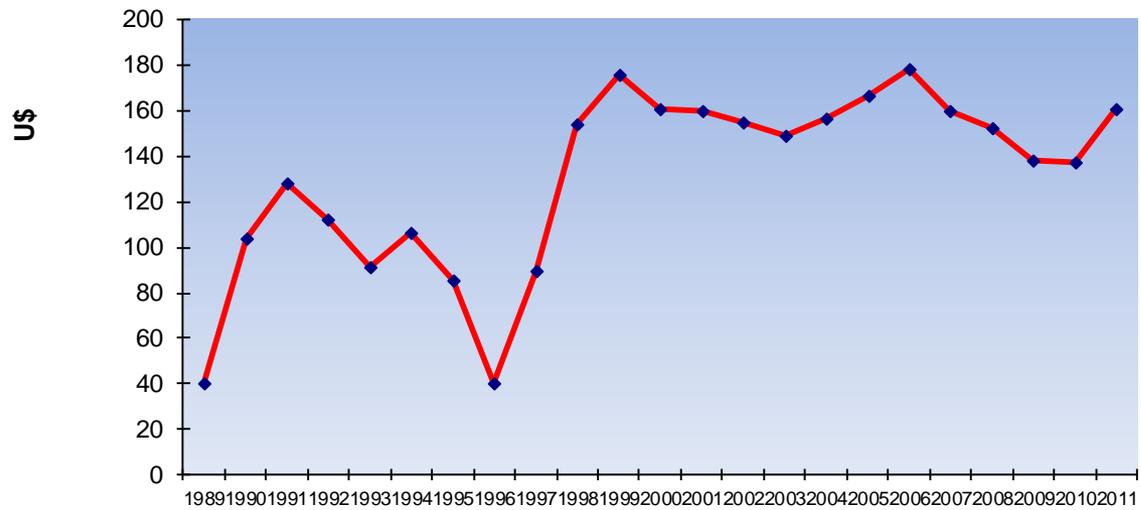
# Figures

Hearing Aids traded in Brazil (1989-2011)



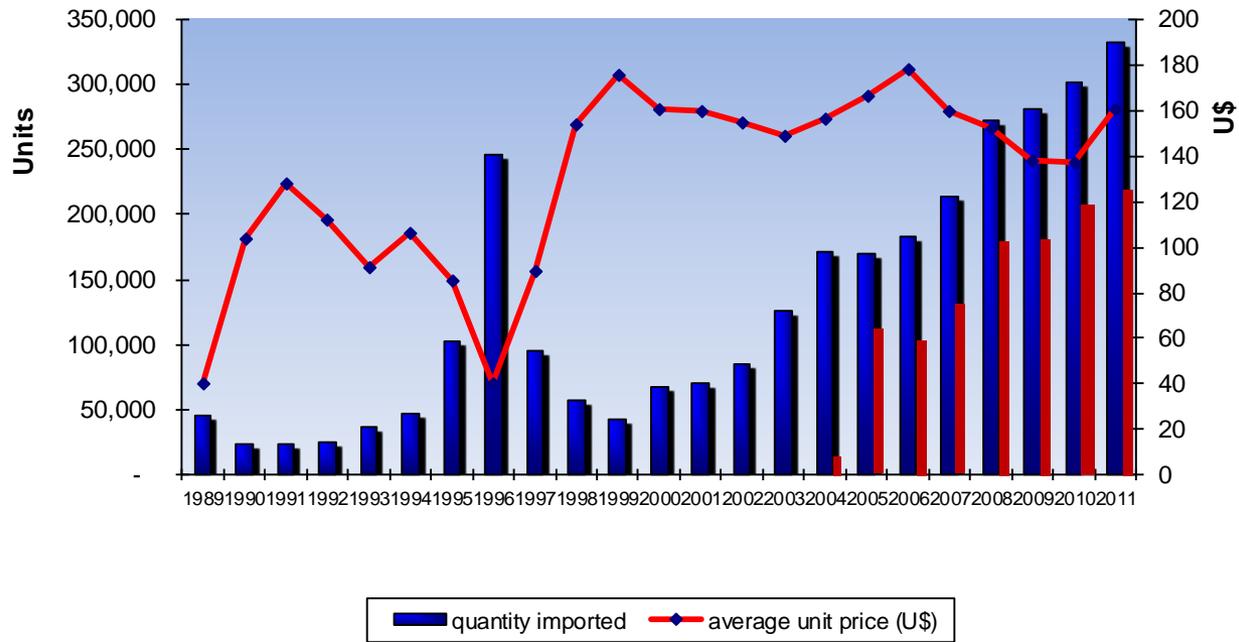
# Figures

average unit price (U\$)



Communication letter - Health Minister (2012).

# Figures



Communication letter - Health Minister (2012).

## Marketing

Counterfeits or product pirates



# Marketing

Design copies or trade dress



Images: Internet (2012).

# Engineering

## Original Equipment Manufacturer (OEM)



[AcoSound Hearing Aid , Acomate 210 BTE](#)

**Min. Order: 10 Pieces**

2WDRChannels 4 adjustable frequency bands  
 Digital signal processor  
 Adaptive noise reduction  
 Adaptive feedback cancellation...

Compare

[29 Similar from this Supplier](#)

Hangzhou Invaxe Medical Technology Co., Ltd.  
 [ Trading Company ]

China (Mainland)



[Rechargeable mini hearing aid with NI-MH battery](#)

**Min. Order: 500 Pieces**

Rechargeable mini hearing aid with NI-MH battery  
 -good quality and low price  
 -mini in the ear  
 -long warranty period...  
 Type: **hearing aid**

Compare

[1293 Similar from this Supplier](#)

Huizhou Jinghao Electronics Co., Ltd.

[ Manufacturer, Agent ]

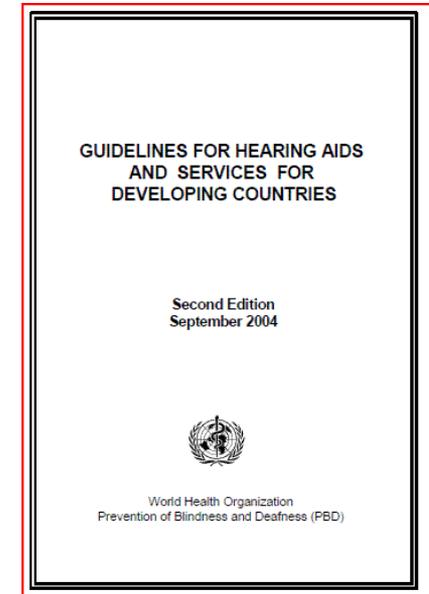


China (Mainland)

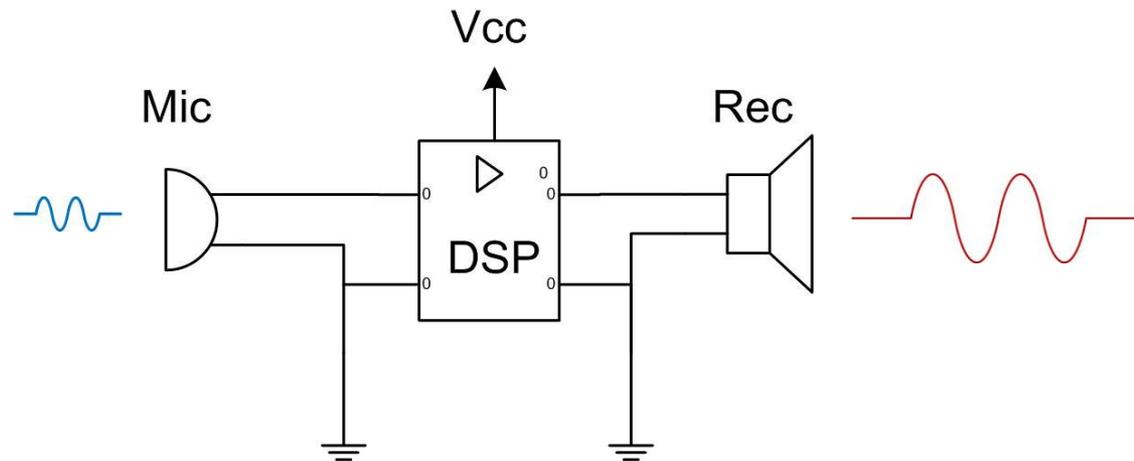


Source: Alibaba (2012).

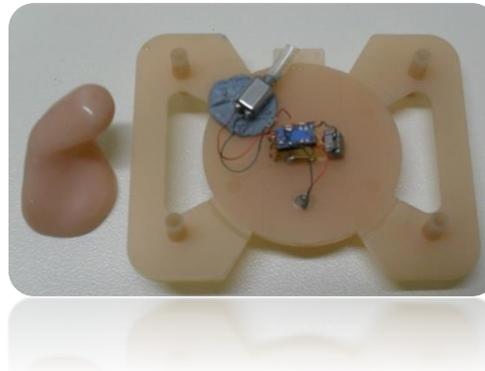
# Engineering



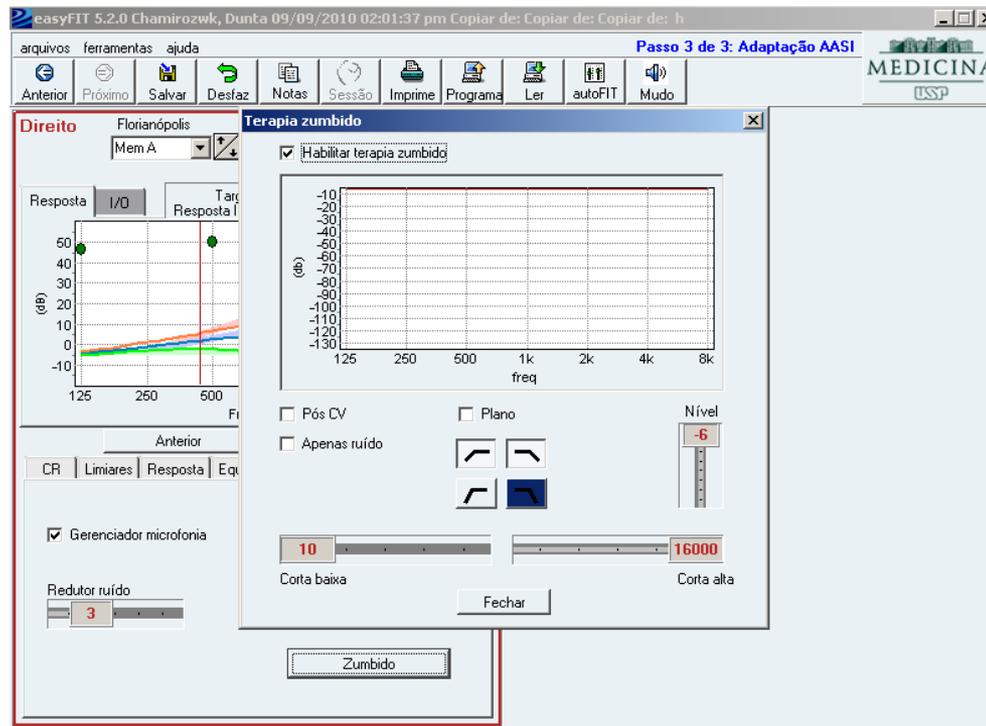
# Innovation



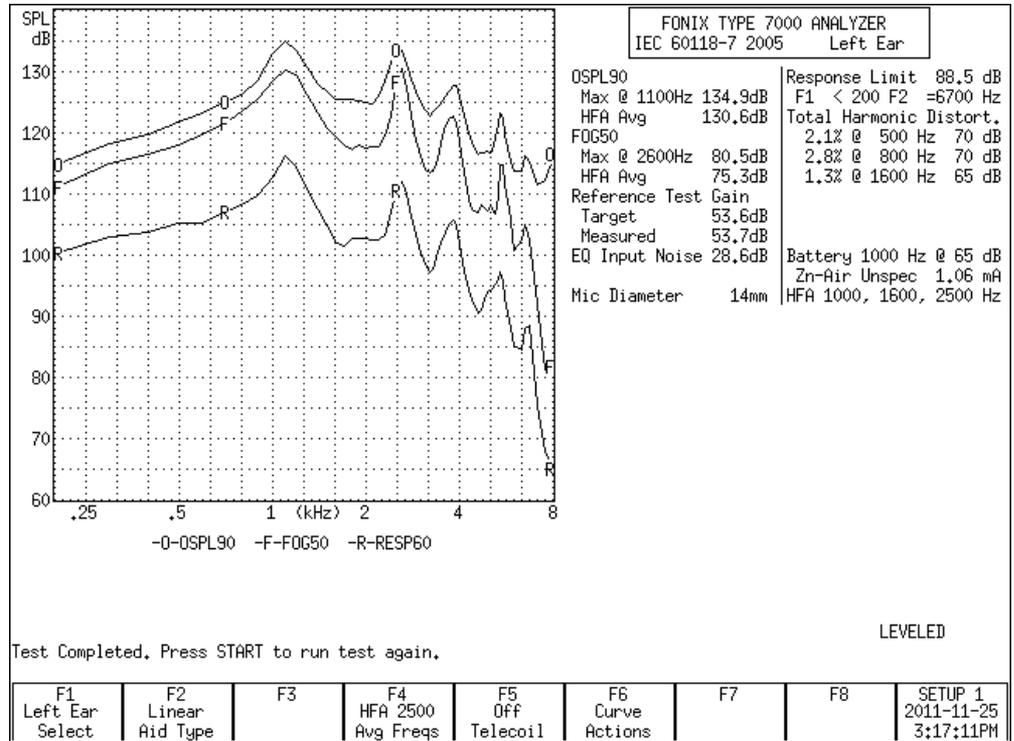
## Solutions provided - HAs



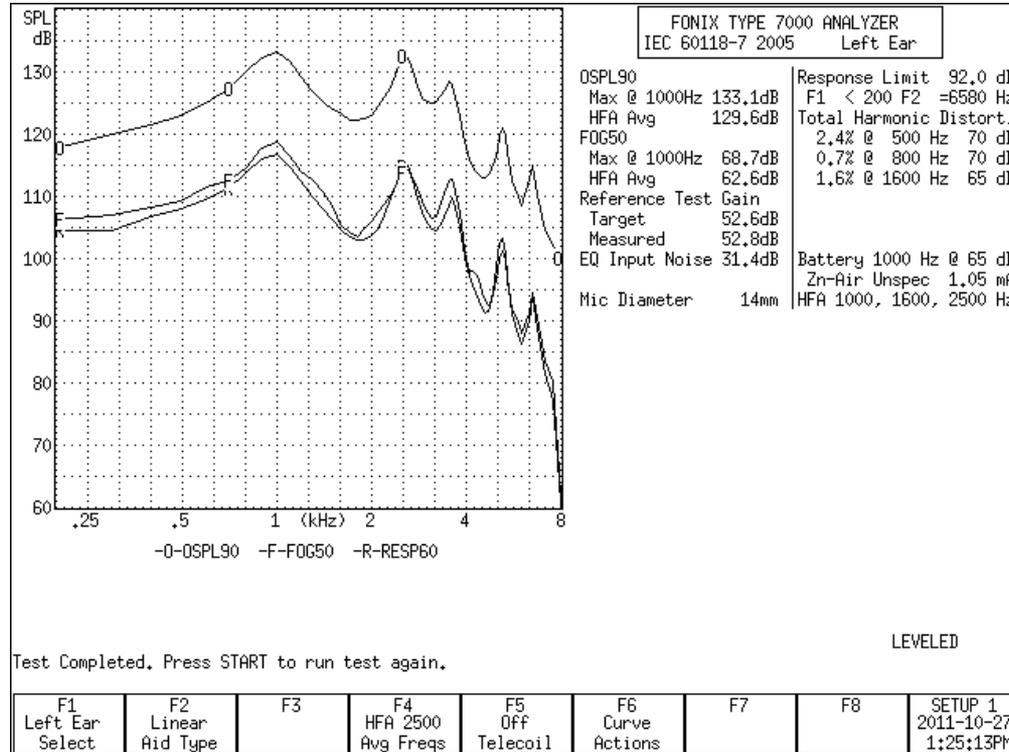
# Solutions provided - HAs



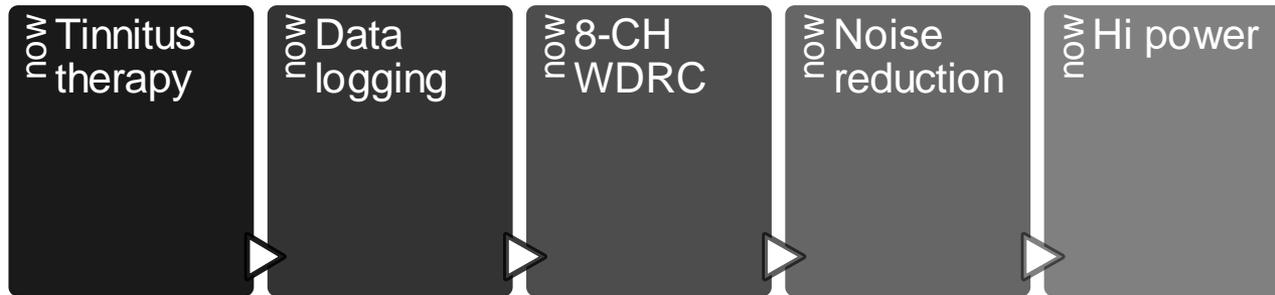
# Solutions provided - HAs



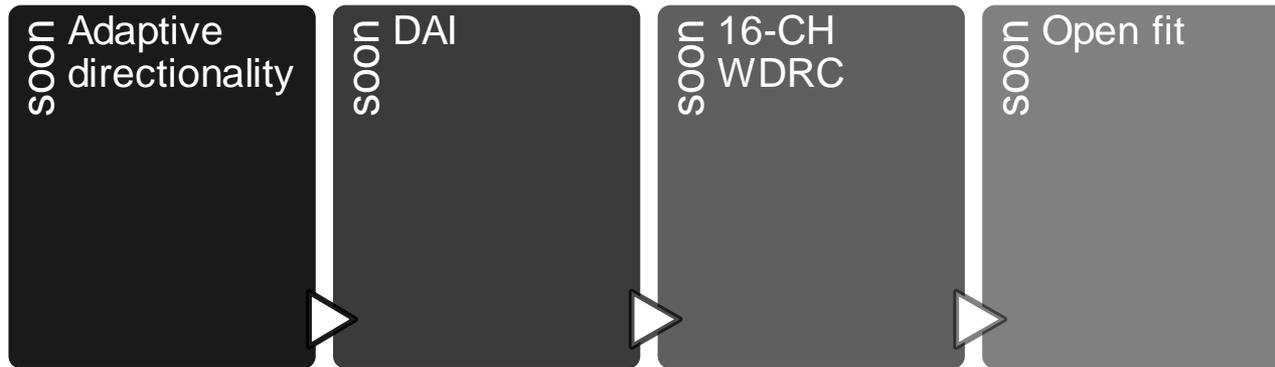
# Solutions provided - HAs



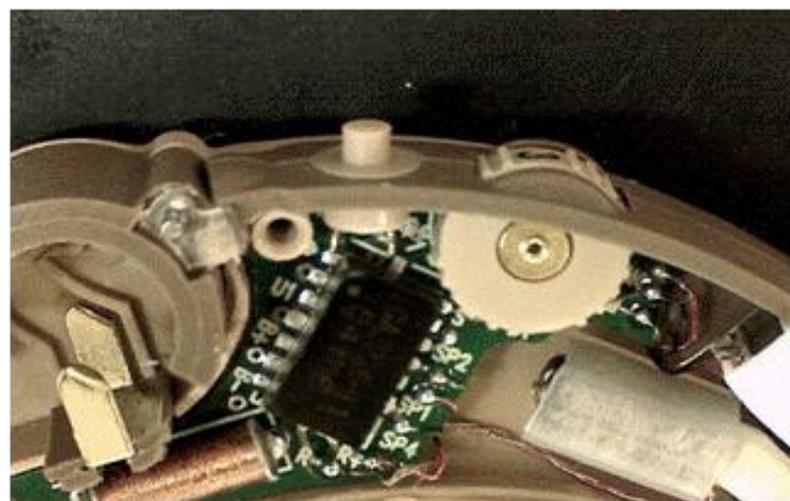
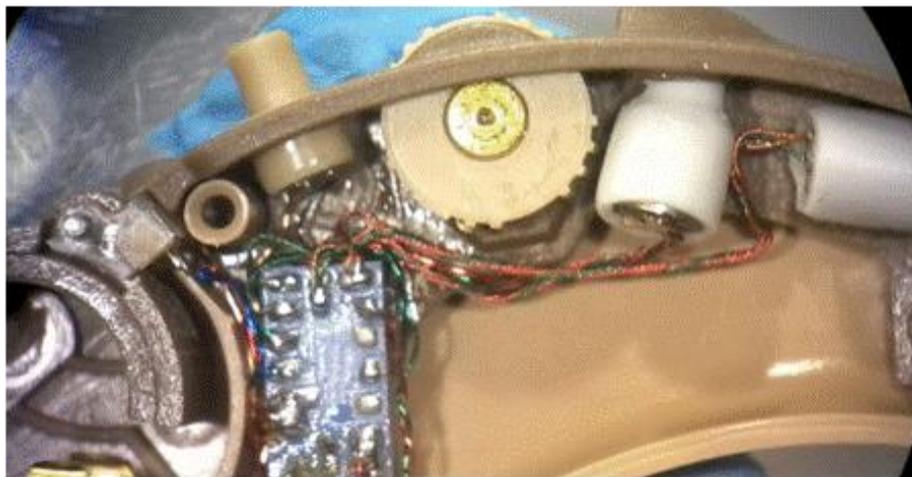
Now



# Coming soon



# Improvements



## Politec 9 - manufacturing plant



## Politec 9 - manufacturing plant



# Engineers have feeling



