



Digital Sound is Everywhere

...We make it better

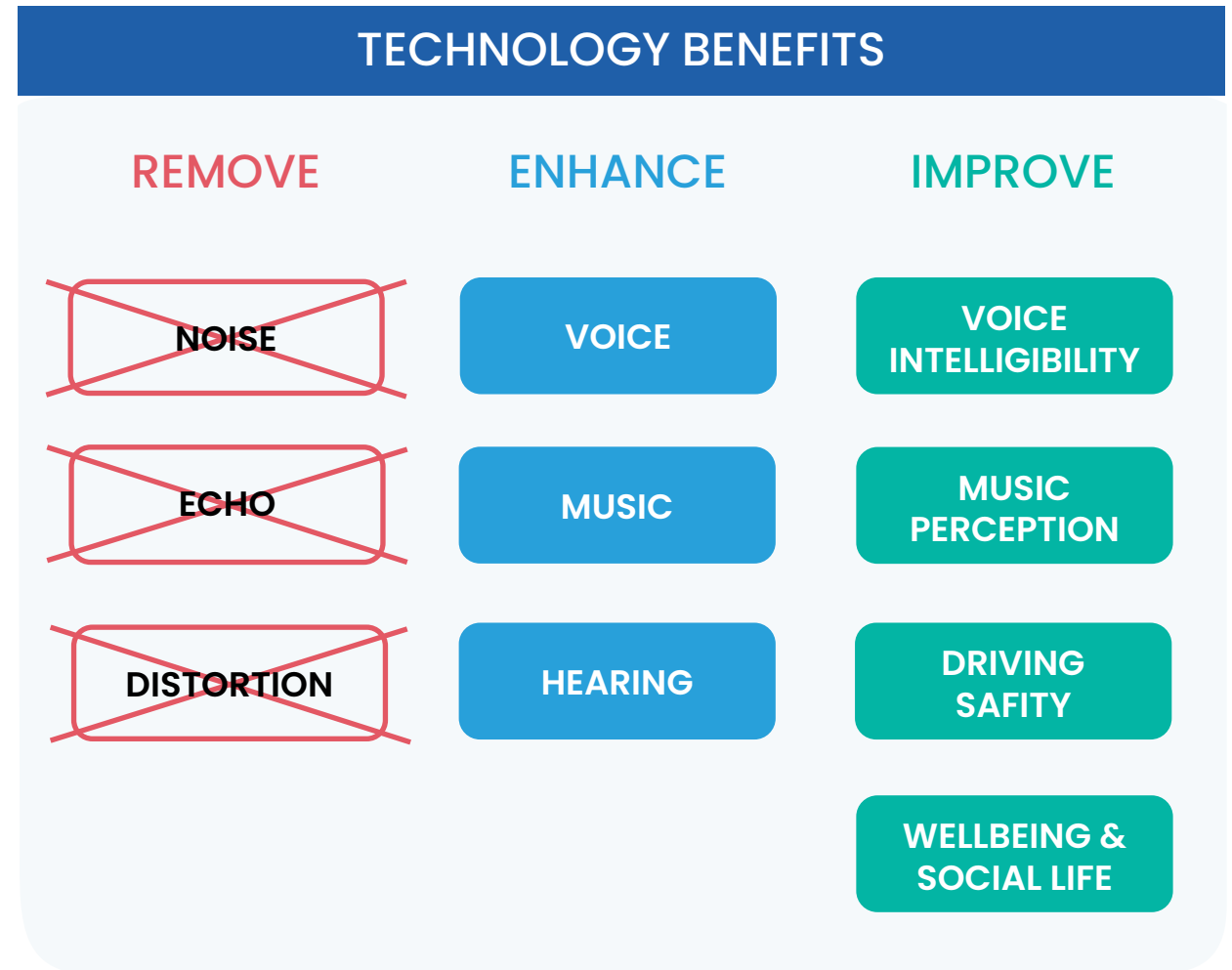




DSP Software that Makes Sound Better



- **Founded 2002**, HQ in Israel, Haifa. Offices in China, Korea, Armenia
- **35** full time employees
- **Founder & CEO** – Dr. Alexander Goldin



Alango DSP Software is the key for ... \$ 100B Market



AUTOMOTIVE INFOTAINMENT

Market size \$24B
CAGR 9%



AUDIO/VIDEO CONFERENCING

Market size \$7B
CAGR 12%



HEADPHONES & EARBUDS

Market size \$58B
CAGR 13%



HEARING AIDS & ASSISTIVE LISTENING

Market size \$9.4B
CAGR 4.4%



VOICE CONTROLLED HOME DEVICES

Market size \$4B
CAGR 20%

BY 2022, ALANGO DSP TECHNOLOGIES ARE INSIDE OF MORE THAN 70M DEVICES

Alango has a potential to significantly improve its market position and share by perfecting existing voice technologies, developing new solutions, and continuing to provide excellent customer support.

Its customer base provides a perfect platform for growing Alango's customer and application base.

Alango Technologies Power Products from World-Class Companies

Bowers & Wilkins



Lenovo

GARMIN®

BANG & OLUFSEN



logitech



LUCID

NEC

Pioneer

SONY



JVCKENWOOD



Alango Solutions Portfolio 1



VOICE COMMUNICATION ENHANCEMENT

Improves quality of human-to-human communication by enhancing user's voice while reducing noises, eliminating acoustic echoes, decreasing reverberation, optimizing loudspeaker loudness and more ...

APPLICATIONS: automotive hands-free, conferencing systems, headphones, headsets, earbuds



AUDIO ENHANCEMENT & PERSONALIZATION

Increases audio clarity, improves perception of stereo and space, optimizes sound according device, user's listening preferences, auditory system and listening environment.

APPLICATIONS: automotive sound, personal audio, loudspeakers & soundbars



HEARING ENHANCEMENT & PROTECTION

Improves face to face and hands-free conversations, live and recorded audio perception for people with hearing loss by reducing ambient noises, decreasing acoustic feedback and personalizing devices' sound according to self administered hearing test.

APPLICATIONS: Bluetooth headsets and earbuds, prescription and OTC, hearing aids, assistive listening devices

Alango Solutions Portfolio 2



SPEECH RECOGNITION ENHANCEMENT

Facilitates human-to-machine communication by clearing user's voice signal from noises, acoustic echoes and other interferences.

APPLICATIONS: voice control of smart speakers, smart appliances, voice communication with virtual personal assistants with AI (e.g. ChatGPT)



SOUND REINFORCEMENT

Facilitates face-to-face, ultra-low delay communication between people reinforcing their voices in noisy or reverberant environments with noise reduction and acoustic feedback cancellation.

APPLICATIONS: In Cabin Communication (ICC) systems between the driver and passengers; educational classes and conference halls



AUTONOMOUS & ASSISTED DRIVING, AUDIO FOR VIDEO RECORDING

SoundAround™ technology enables recording outside sounds (sirens, collisions, peoples' voices) as well as in-car "sound transparency" without using external microphones.

APPLICATIONS: autonomous and assistive driving; car video recorders, car black boxes

Alango Solutions Portfolio 3

BeHear™ LINE OF CONCEPT CONSUMER ELECTRONICS PRODUCTS THAT SHOW THE WAY

Alango has developed BeHear line of advanced hearing amplifiers. BeHear products can be bought on-line as well as various distributors and sales channels worldwide. BeHear products serve to perfect the technology from users' feedbacks, prove the concept, and demonstrate the capabilities of Alango hearing enhancement solutions.

MULTIPLE INDUSTRY AWARDS, EXCELENT PROFESSIONAL REVIEWS AND HAPPY USERS' TESTIMONIALS HELP TO DEMONSTRATE ALANGO CAPABILITIES TO POTENTIAL PARTNERS AND TECHNOLOGY LICENSEES

- Hearing self-tests
- Self-fit, advanced, personalized listening & hearing amplification
- Assistive listening capabilities
- Full Bluetooth stereo headset functionality optimized for hearing loss



Alango Deep Learning AI Solutions

Alango has developed BeHear line of advanced hearing amplifiers. BeHear products can be bought on-line as well as various distributors and sales channels worldwide. BeHear products serve to perfect the technology from users' feedbacks, prove the concept, and demonstrate the capabilities of Alango hearing enhancement solutions.



ALANGO APPROACH

- Relatively small, easy to implement neural networks
- Combination of classical and deep learning solutions

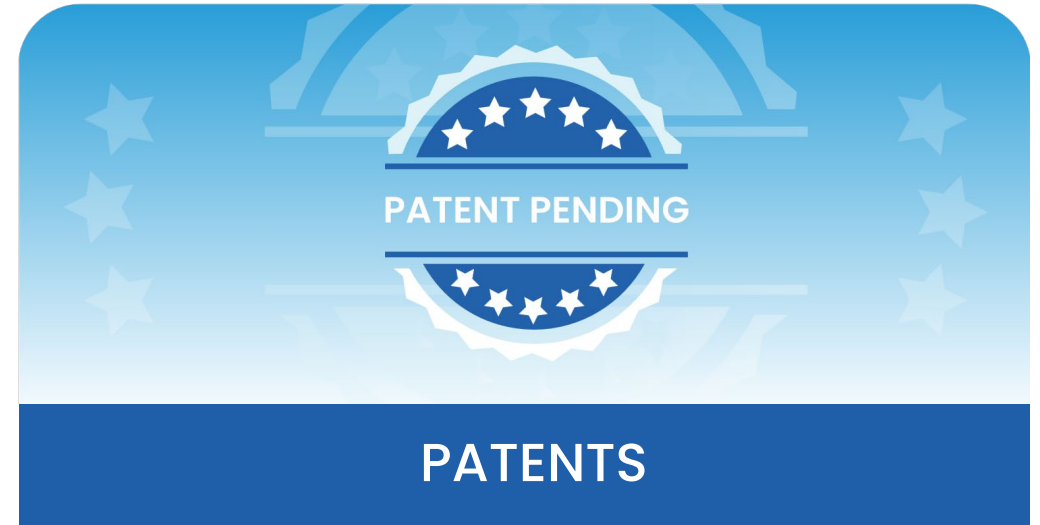
ALANGO NEURAL NETWORKS STATUS

- Noise reduction network – ready for deployment
- Dereverberation network – ready for deployment
- Ultra-low latency network – under development
- Beamforming network – next step

Alango IP



- 21 years of practical experience in solving customers' problems
- Proprietary DSP algorithms
- 10s of thousands lines of the software code
- Proprietary development and tuning tools
- Huge database of audio files from multiple customers for validation of new technologies



- 2 pending patents
- 4 patents in preparation

Competitive Landscape

REPUTATION

- >21 years of practical experience
- >70M products powered by Alango DSP software

COMPLIANCE TO STANDARDS:

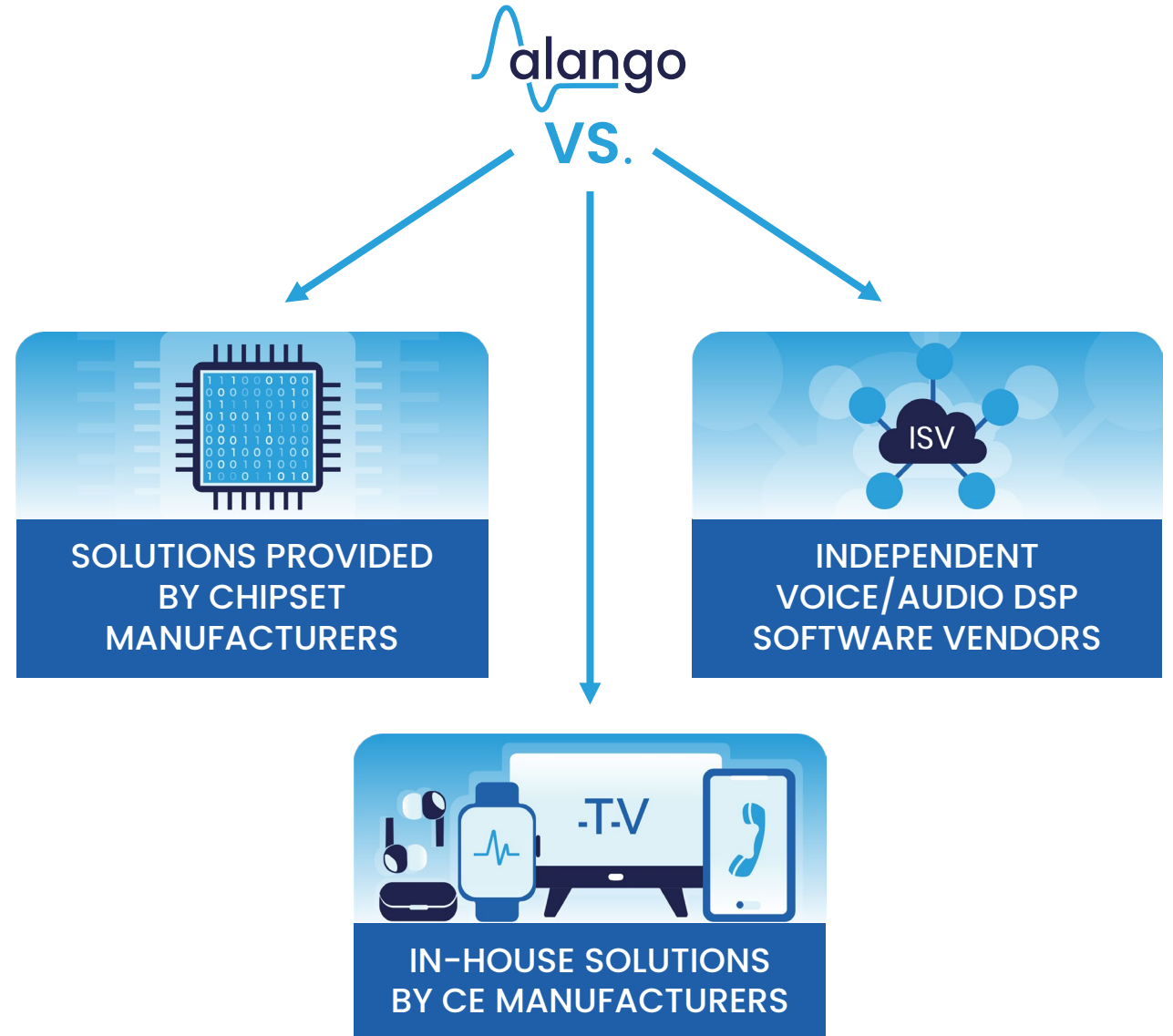
- Automotive ITU certifications for hands-free
- In Cabin Communication ITU certifications
- Apple CarPlay certified products
- Teams, Tencent, Zoom certified products

ONE STOP SOLUTION FOR VOICE, AUDIO, HEARING ENHANCEMENT

- Easier integration of multiple software packages from one vendor
- Bundling pricing model (cheaper than by components)

OUTSTANDING CUSTOMERS' SUPPORT

- Fast and efficient technologies customization for specific customer requirements
- Proprietary development and debugging tools
- Direct local support in China and Korea, support via partners in Taiwan, Japan



Alango Team



Dr. Alexander Goldin – Founder & CEO of Alango Technologies

PhD in Mathematics and Physics, Dr. Goldin has extensive research and development experience gained from his time at IBM, J&J, and Altec Lansing. He has led Alango to become a major player in the industry with innovative solutions that have been adopted by major players in the telecommunications, automotive, and consumer electronics industries. With a proven track record of success, Dr. Goldin is committed to continuing to drive innovation and growth at Alango.



Alex Radzishewsky – Chief Audio Engineer, Director of Product Development

Accomplished audio engineer & DSP expert, leveraging 30 years of experience & education in Math/CS to drive Alango's vision as the world leader in voice/audio/hearing enhancement. Patented tech innovator & team leader, committed to cutting-edge product development & excellence in audio performance.



Robert Schrager – Director of Sales & Marketing

An engineering graduate, held senior sales and marketing positions for 25+ years at top tech suppliers such as Epson Electronics, specializing in business development. Since 2015, he has been promoting Alango's voice/hearing/audio tech and securing licensing agreements with mid-large OEM/ODM customers globally.



Interested? We are looking forward to hearing from you

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or comments, don't hesitate to contact us.

We will appreciate your feedback if you give a hint
how we can make this presentation better.



General enquires: info@alango.com

Sales enquiries: sales@alango.com

Engineering enquiries: tech@alango.com



Main office: +972 (4) 8580 743

Fax: +972 (4) 8580 621



Alango Technologies Ltd.

2 Etgar St. PO Box 62

Tirat Carmel 3903213 Israel



www.alango.com