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#### MATSUKO

MATERIANO

HOLOGRAPHIC PRESENCE

## Holographic presence Revolutionizing Meetings in the 6G Era

#### Stefania Puzderova

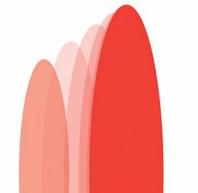
Business Development

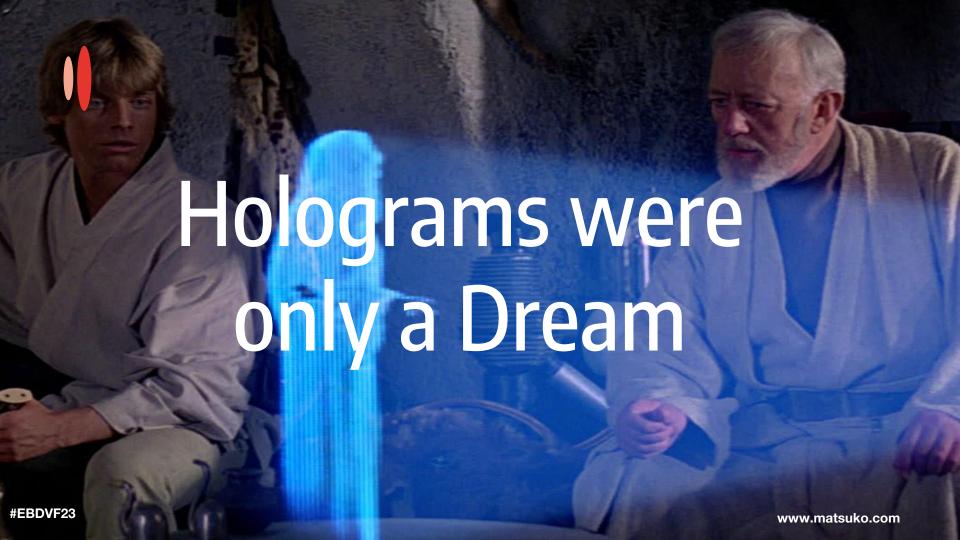


Relevant Prior Experience



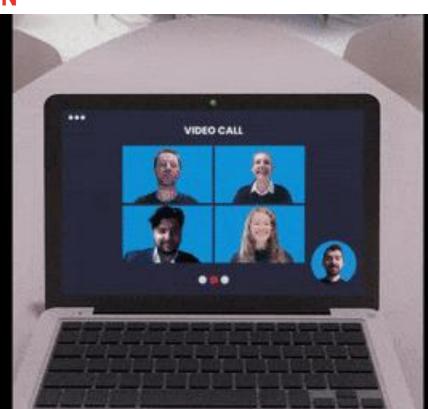












#EBDVF23 www.matsuko.com

In MATSUKO we believe that

Holograms unleash the full spectrum of emotions, while avatars limit them to a narrow range.



#### Hologram quality evolution - real time









11/2022

6,42 FPS

10,7Mb/s

First videos. Poor hologram quality, low number of FPS. Fairly granular and little sense of real time 1/2023

7,51 FPS

14,3Mb/s

Performance optimization setting for execute processing on GPU threads, not working properly on Telefonica GPUs 3/2023

15 FPS 11 Mb/s

Great increase in image quality, dynamism and hologram definition. Higher FPS number achieved so far. 4/2023

12,7 FPS

9 Mb/s

Improved hologram quality for ears. Still good quality



## One Hologram to Many Viewers

Live or prerecorded



**Corporate events** 

# One Hologram to One Hologram

Interactive



Interactive sessions

#### Many Holograms to Many Holograms

**Immersive** 



**Hybrid office** 



#### **EDUCATION - HIGH SCHOOLS**



Teachers as holograms for more engaging courses.

#### **NGOs - INSPIRATIONAL PITCHES**



Hologram of role models inspire girls in their careers.



## HUMAN RESOURCES AND CEOs PRESENTATIONS



CEO of DT IT Solutions
Welcoming employees, onboarding newcomers.
In the offices and also during the Career expos.
https://www.youtube.com/watch?v=snenSGSpqEQ

#### **SPORTS**

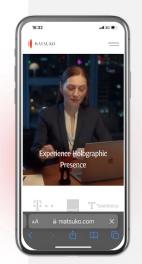






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# Patented real-time single camera technology

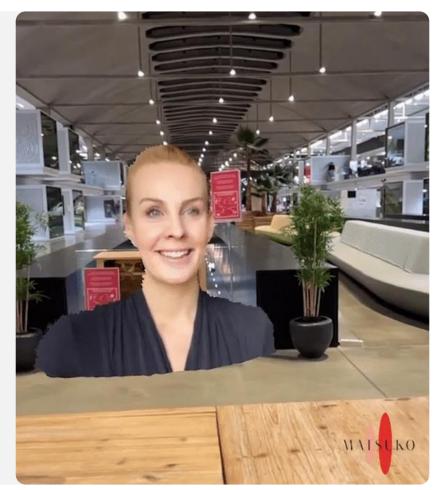














### Today, we make history

United States Patent Application No. 17/538,664 Filed November 30, 2021
METHOD, SYSTEM, AND MEDIUM FOR 3D OR 2.5D
ELECTRONIC COMMUNICATION

We are pleased to inform you that we have received an Issue Notification from the United States Patent and Trademark Office. The above-referenced application has been allotted U.S. Patent Number 11,783,531 and will issue on October 10, 2023.



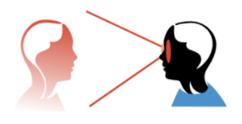


## **Technology: Machine learning on Cloud**









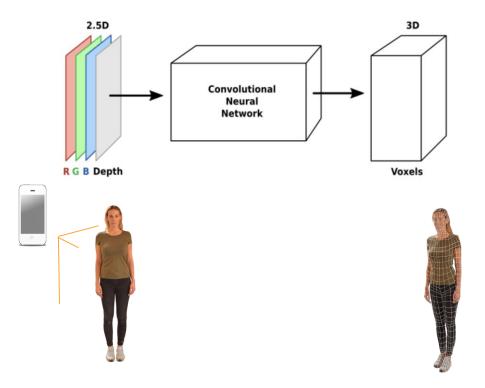
Mobile App
Single camera
(Sender)

ML algorithms running on cloud infrastructure (or on-premise)

Glasses (Receiver)

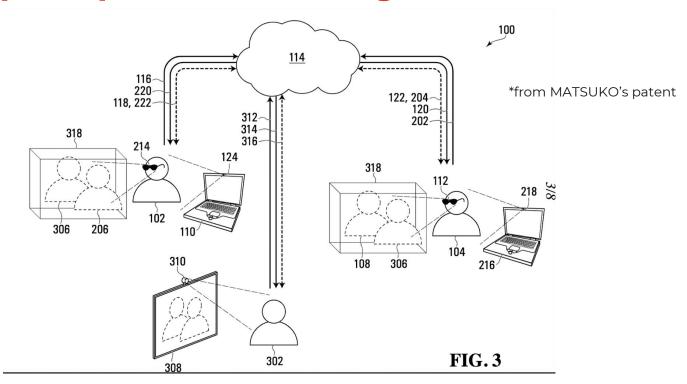


## **Human pixel by pixel into voxels**



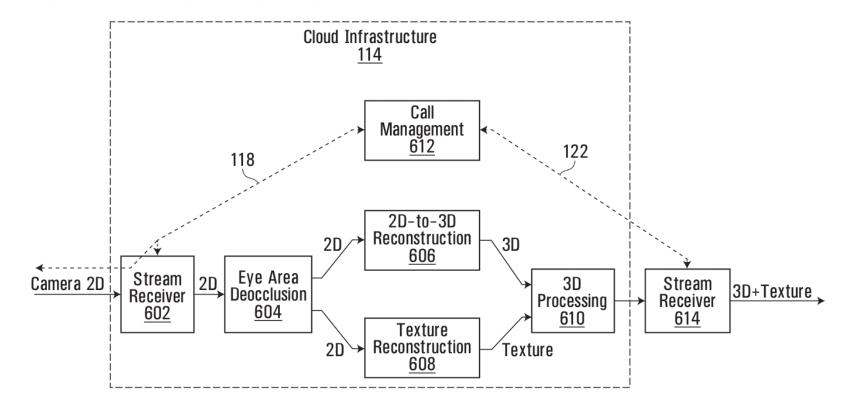


## Many participants, hardware agnostic





#### **Cloud Infrastructure**







6G eXperimental Research infrastructure to enable next-generation XR services targets the development and extension of the four research infrastructures to make them ready for advanced experimentation:

- 1) networking, computing enablers 2) XR enablers
- **RAN** enablers
- 4) Sustainability enablers for local green energy, controlling energy sources and charging/discharging, energy measurement and optimization solutions































**6GXR:** to strengthen **European leadership in 6G technologies** by enabling **next-generation XR services**and infrastructures

IMS - Control layer: utilization of existing WebRTC standardisation

Increase in bandwidth and the complex capacity to transmit these volumes of data & ensure low latency and jitter values

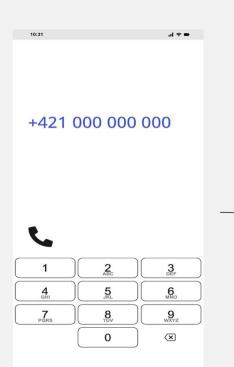
#### Step 1 Start a call

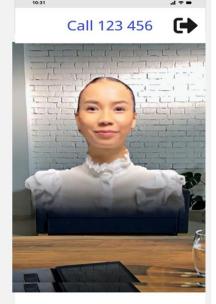
Type a phone number and start a call.

#### Step 2 Holographic presence

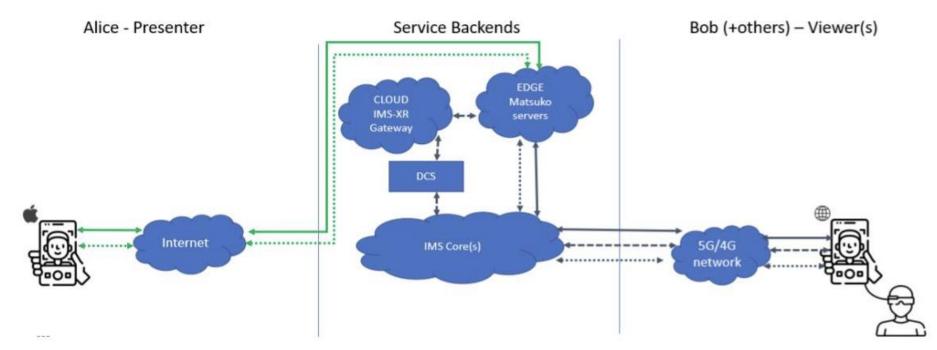
We are directly joining the MATSUKO Holographic call.

Call is rendered with WebGL. We can use gestures to move around hologram in 3D environment











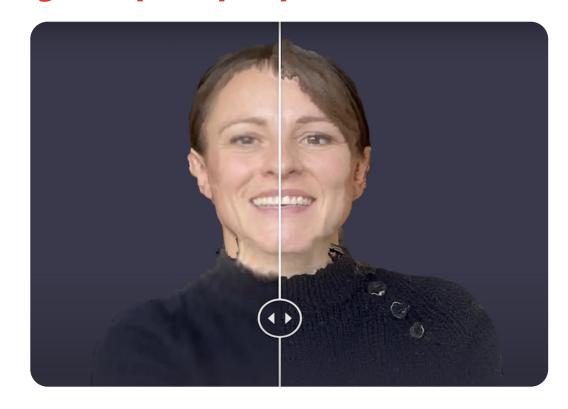


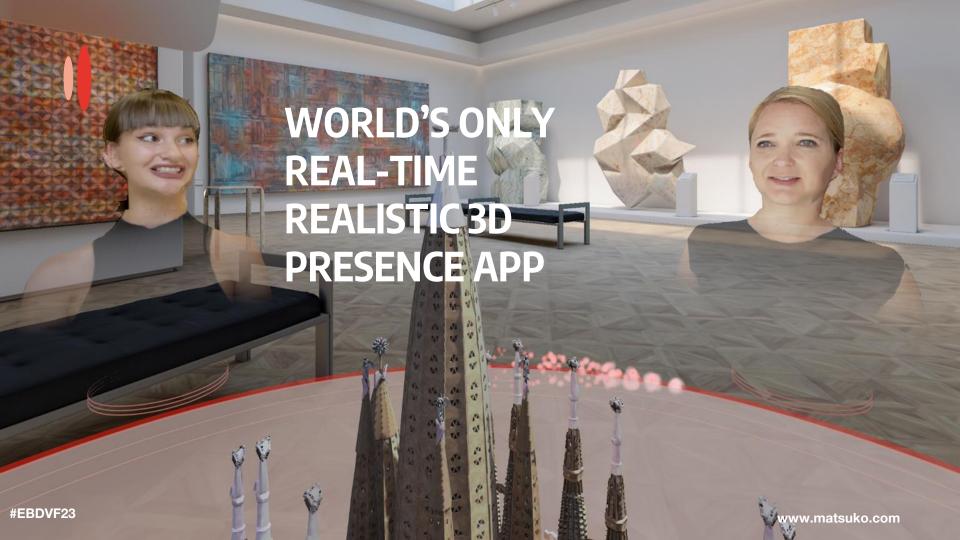
## Network APIs: Hologram quality improvements

**5G Network APIs** Real-time holographic calls

Effect on hologram quality in heavy traffic:

- **Lower latency**
- **Lower jitter**
- Higher bandwidth
- **Higher resolution**







**Joao Gomes, Director,** Global Solution and Business Development, NVIDIA

I think this is amazing. This is this the application that captures our imagination to think about 5G and the **future of communication** and video conferencing. I was amazed to see how real this is.

I know of no other company on the planet producing **real time holograms with the quality** that you are producing.

You look very great, really good. It's like in Star Wars. Good spatial feeling, really great. And much more personal than 2D video. This is very impressive.

66

Impressive experience of the Matsuko app. I was impressed by the **fidelity** of the images.

**Tom Winstanley** UK CTO. NTT data

**Randy Adams** 

CEO, C-Level Solutions

We will be able to offer our customers a new way of communicating, using this new holographic technology to deliver a more immersive "virtually there" experience.

**Lars Vogel,** Director of New Work, T-Systems Multimedia Solutions GmbH

The app in incredible, with a **strong feeling of presence** of the person.

Adrian Verdugo, Deloitte

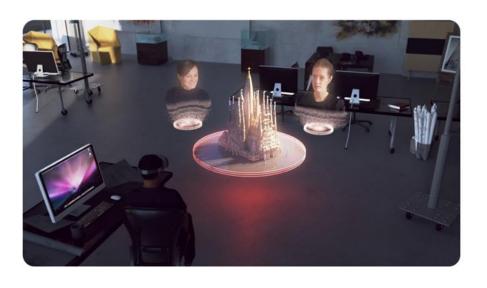
#### **Daniel Hernández**

VP Devices & Consumer IoT, Telefónica

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## **EARLY ACCESS - 3D CONTENT CREATORS**

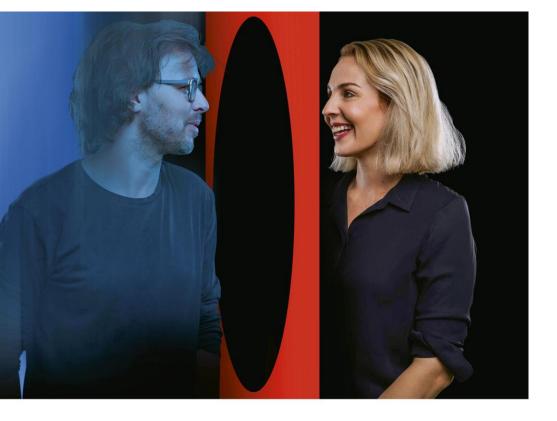


# How does MATSUKO work?

MATSUKO is a mixed reality app that allows you to have holographic meetings with other people anywhere in the world. Use your iPhone to capture and stream yourself and XR headset to view others' holograms and 3D content.

It is designed to provide a realistic and immersive communication experience that feels like in-person meeting.

SIGN UP ightarrow



- in MATSUKO
- MatsukoCompany
- MATSUKO
- **o** matsukocompany

Get together.