

Sophia robot

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### PATENTED

#### **ABSTRACT**

• Sofia the robot first appeared in 2016,[1] this • human-like robot embodies dreams for the future • of artificial intelligence, as it is a unique blend of • science, engineering and art, Sophia is at the same • time a human-made science fiction character • envisioning the future of artificial intelligence and • robotics, and a platform for robotics Advanced • Artificial Intelligence Research,[2] and the artificially intelligent robot "Sofia", which was • created and programmed by "Hanson Robotics", a • Hong Kong-based humanoid robotics company, is • the first robot in the world to be recognized as a • Saudi citizen •

#### BACKROUND

She sang in a concert.

She was awarded the title of the first non-human Saudi citizen.

She discussed the future of the human race (against another robot).

She addressed the audience in Mandarin.

spoke before the United Nations General Assembly.

# EXPLANATION OF PICTURES

Picture 1- general of the invention in • operation

Picture 2- general view of the invention from • the side

Picture 3-Same information •

## DETAILED DESCRIPTION

• Sophia has a height of 167 cm, a width of 41 cm, and a • weight of 20 kg.[4] Sophia's face is made of a patented material called "Frubber"; It is a skin proprietary with nanotechnology that simulates muscles and real human skin, allowing it to simulate facial features and expressions, [2] as it is able to respond to questions, interact with people and even tell jokes, and what makes Sophia completely different from other artificial intelligence systems is that it has many Human-like features, including having 200 facial expressions,[5] and her "brain" running on cloud computing, Hanson Robotics' cloud-based AI enables cloud-scale control and deep learning data analysis to process the huge social data that collected from interactions with the environment surrounding the robot, the artificial intelligence that makes up Sophia's neural network makes it able to make eye contact, recognize faces and understand human speech

## PROTECTION ITEMS

- Dedicated wide-angle chest camera 1080p.
- Intel RealSense Camera.
- Dual 720p HD cameras (one for each eye).
- External USB port. Knuckle angle sensors. The strength in the arm joints. Fingertip sensors.

Audio localization group. Inertial Measurement Unit (IMU).



#### **PICTUTRES**

Picture 3 Picture 1 •

Picture 2 •