



## CONCEPT OF NOKIA MORPH TECHNOLOGY

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### Abstract

In business a product could have a shorter life if it Can't win the hearts of people and showcase new Technology, so Nokia is coming up with the Nokia Morph flexible mobile phone which the company Claims include nanotechnology and would immensely. Benefit its end-users. The main benefit of

Nanotechnology is that its components are flexible, Transparent and extremely strong. The company Believes this latest technology would be a distinctive Phone by 2015.Nokia morph is a joint technology Concept, developed by Nokia Research Center (NRC) And the University of Cambridge (UK). The morph Demonstrate how future mobile device might be Stretchable and flexible, allowing the user to Transform their mobile devices into radically different Shaped.

Keywords: flexible, transparent, Nano Technology , glitches

### Introduction

The "Nokia Morph" is a theoretical future Device based on nanotechnology that might enable Future communication devices. It is intended to Demonstrate the flexibility of future mobile devices, In regards to their shape and form allowing the users To transform them according to their preference. It Demonstrates the ultimate functionality that Nanotechnology might be capable of delivering i.e. Flexible materials, transparent electronics and selfcleaning Surfaces. It also features nanosensors that Can interact with the environment to provide key Information for anything from temperature changes To pollution.

Nanotechnology enables materials and Components that are flexible, stretchable, transparent And remarkably strong. It is featured in The Museum of Modern Art "Design and The Elastic Mind" exhibition. The Morph concept, being explored by Nokia Research Center (NRC) in collaboration with the Cambridge Nanoscience Centre (United Kingdom) is a concept Device that promises to be a bridge between highly Advanced technologies and their potential benefits to End-users.



FIG1 :-MORPH IN OPEN MODE



FIG 2:-MORPH IN FOLDED MODE



FIG 3:-MORPH IN WRIST MODE

### What is nokia morph

Nokia is keep on going and maintains its position as The most popular brand in India. Nokia has already Showcased various featured handsets. Previously we Have written a lot about the Smartphone's of Nokia. Today we introduced you with **Nokia Morph**, the Most awaited mobile of Nokia.



Nokia Morph is a joint nanotechnology concept, Developed by Nokia Research Center (NRC) and the University of Cambridge (UK). The Morph Demonstrates how future mobile devices might be Stretchable and flexible, allowing the user to Transform their mobile devices into radically different Shapes. It demonstrates the ultimate functionality that Nanotechnology might be capable of delivering: Flexible materials, transparent electronics and selfcleaning Surfaces.

The phone could be folded to be stored in the pocket Or bag or utilized as a watch or stylish wrist band that Could have its own personalized wallpaper. The *Morph* concept integrates different kinds of Sensors which allow these futuristic devices to sense The environment like air quality, temperature and Humidity.

### Nanotechnology

Nanotechnology means “The science, Engineering and technology related to the Understanding and control of matter at the length Scale of approximately 1 to 100 nanometers”. Nanotechnology was first introduced in 1959 by Richard Feynman. Nanotechnology is an umbrella Term that encompasses all fields of science that Operate on the nanoscale. Development of Nanotechnologies creates a new basis for solutions And systems in sensing & actuation, memory, Information, signal processing and communication. It Creates miniaturized, power efficient technologies for The future mobile, multimedia and computers and Also enables intelligent systems that can be embedded Into human environments. Nanotechnologies also Provide a new generation of added value products And services with superior performances across a Range of applications.

### Features & specification in Nokia Morph

Morph concept technologies might create fantastic Opportunities for mobile devices:

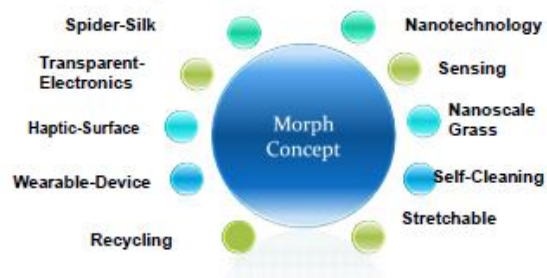
- Newly-enabled flexible and transparent Materials blend more seamlessly with the Way we live
- Devices become self-cleaning and selfpreserving
- Transparent electronics offering an entirely New aesthetic dimension
- Built-in solar absorption might charge a Device, whilst batteries become smaller, Longer lasting and faster to charge.
- Integrated sensors might allow us to learn More about the environment around us, Empowering us to make better choices

In addition to the advances above, the integrated Electronics shown in the Morph concept could cost Less and include more functionality in a much smaller Space, even as interfaces are simplified and usability Is enhanced. All of these new capabilities will Unleash new applications and services that will allow Us to communicate and interact in unprecedented Ways.

### Specifications of morph are:

- 2G network
- Display: Dokunmatik Ekran
- Dimensions: 110x49x19 mm
- QWERTY Keyboard
- Bluetooth – V2.0
- Colors –Green
- Accessories – Charger, Hands free,
- USB
- Cable
- Wi-Fi
- Flash Memory
- Camera, FM radio, mp3 Player, games

### Features of Morph Concept



### Advantages

- stretchable and flexible Electronics.
- transparent electronics.
- self-cleaning surfaces.
- it can sense it's surrounding Environment.

- it draws power from the sun for Recharging

### **Limitations**

- The initial manufacturing cost is Very high.
- The expected market price is Around rs 60000.
- Conventional dsscs provides Instability related to solvent Leakage and evaporation.
- Stretchable batteries have not Yet being discovered.

### **Future scope**

Nanotechnology is just one key future research area For NRC, but an important one that will give us the Freedom to design materials by manipulating atoms And molecules at the nanometer level. It hence has The potential of being both evolutionary and Revolutionary when applied to mobile technology. A

Few years from now, phones will have new and Innovative features different to the ones that are Widely used today. Nokia Research Center is working On technology up to seven years in the future and Creating concepts that challenge conventional Practices and spark new innovations.

1 the shapes could be made much Simpler like in ring shape.

2 morph in open mode could act as a Keyboard for pc's.

### **Conclusion**

Think Morph as a snapshot of a new kind of Mobility made possible through nanotechnology and Along with Nokia Research as their slogan says “Thinking, understanding and creating mobile Innovations for cultures all over the world” and Cambridge University Nanoscience research centre.

The Morph has the potential of being both Evolutionary and revolutionary when applied to the Field of mobile technology and with more it always be bonded and is always be connected to a range of Objects and services that have not yet being imagined. Thus NOKIA MORPH is just a beginning to the Future mobiles.

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