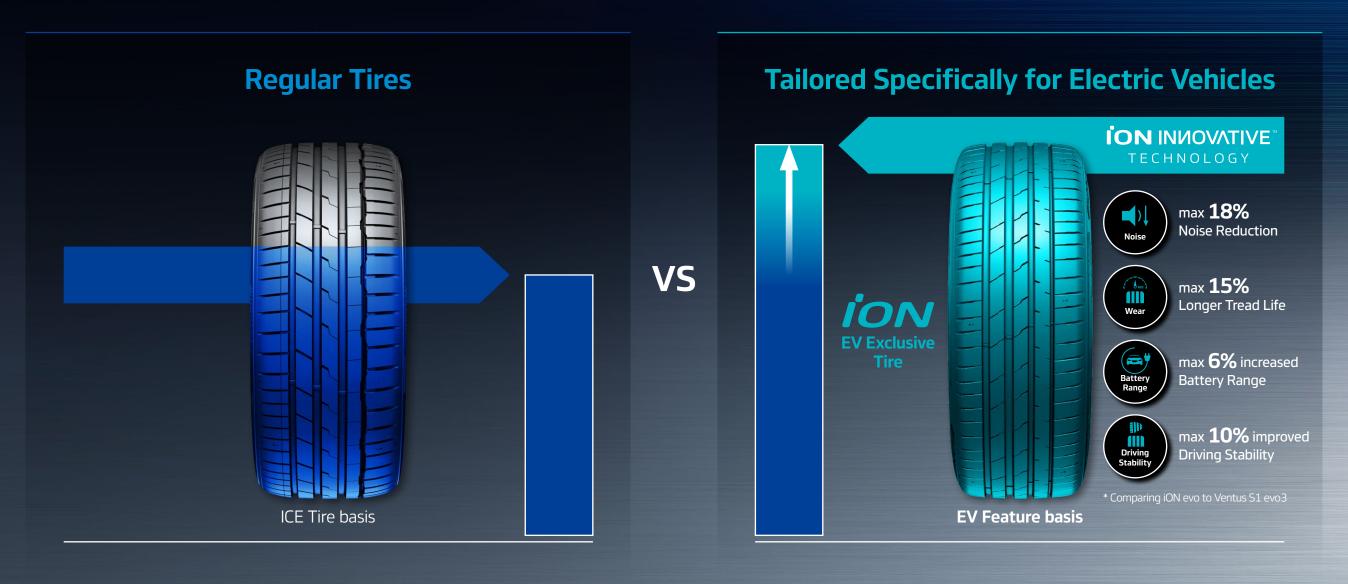


To feel maximum performance from your EV, you need iON tires developed exclusively for EVs. iON utilizes Hankook Tire's iON INNOVATIVE TECHNOLOGY, to perfectly bring out the best in electric vehicles and optimal driving performance.





**EV Characteristics** 

**EV-Specific Tire Needs** 

Why iON
ION INUOVATIVE
TECHNOLOGY

**Quiet Operation** 

**Low Noise** for Comfortable Driving



**Sound** Absorber

**Added Battery Weight** 

(up to 30% increase in total car weight)

**Longer Tread Life** 

for Heavier Load



Super Mileage

**High Instant Torque** 

High Grip

for Rapid Acceleration and Braking



Perfect Grip

- Long Charging Time (0.5 to 8 hrs)
- Travel Range ≈ 400 to 500 km/charge

**Low Rolling Resistance** 

for Less Energy Loss



**Extreme Lightness** 







# iON possesses a system of EV-exclusive tire technology specifically designed to meet the demands of electric vehicles.

## ION INИOVATIVE™ TECHNOLOGY





# Hankook Tire secured 326 EV technology patents, 58 of which are used exclusively in iON.

58 EV patents exclusive to iON

Sound Absorber

9 patents

Super Mileage
11 patents

Perfect **Grip**23 patents

Extreme **Lightness**15 patents

#### Noise Guard Zigzag

8 patents

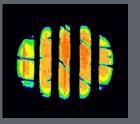
EP Application No.: 20206989.4 and 7 others



**Round Even** 

1 patent

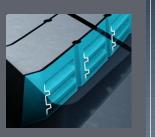
KR Application No. : 10-2021-0004477



**Grip Claw** 

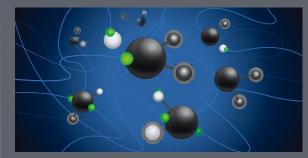
8 patents

EP Application No.: 23157987.1 and 7others



ProCoupling Compound

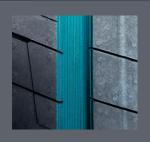
15 patents



Noise Guard Cornhusk

1 patent

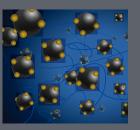
KR Application No. : 10-2021-0079351



ProDurable Compound

10 patents

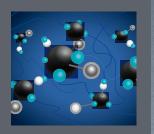
EP Application No.: 18206108.5 and 9 others



ProGrip Compound

15 patents

EP Application No. : 19203083.1 and 14 others



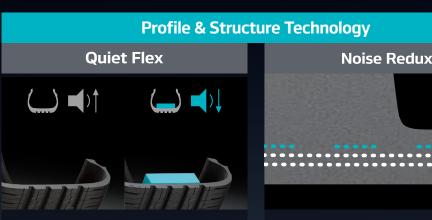
EP Application No.: 20185285.2 and 14 others

#### **INMOVATIVE** TECHNOLOGY

### **EV Noise Performance improved**

## **Sound** Absorber

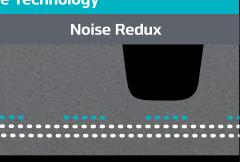




Road noise absorbed with foam insulation

- 6 dBA

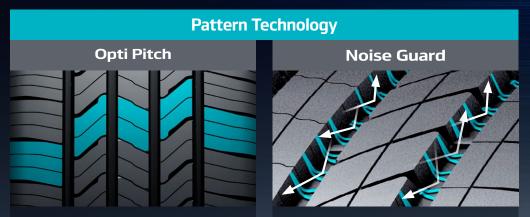
(road surface noise frequency band 180~250Hz)



Reduced noise with optimally spaced aramid reinforcement belt

- 0.5 dBA

(road surface noise frequency band 250~500Hz)



Dispersed noise Dispersed noise by optimizing pattern by widening groove arrangement

Ziqzaq - 0.66 dBA

surface area

Cornhusk - 1.2~1.7 dBA

(pattern noise frequency band around 1000Hz)

#### **Compound Technology**

Silent Tread



Reduced noise

- 1 dBA

(road surface and pattern noise frequency wideband)

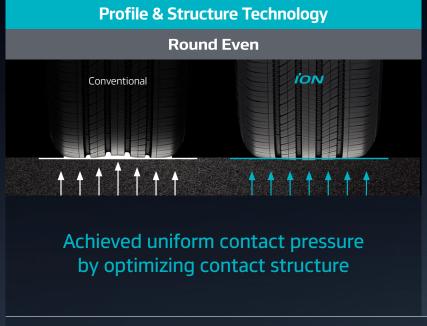
<sup>\*</sup> Based on internal experiments. Results may vary depending on actual environment.

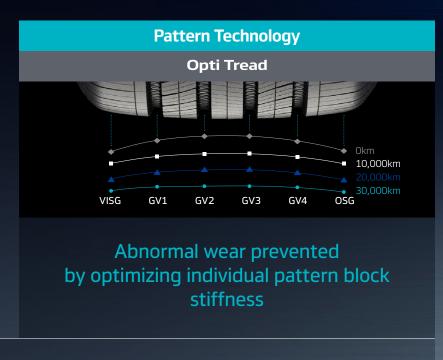
#### **INMOVATIVE** TECHNOLOGY

### **EV** Battery Added Weight optimized

# Super **Mileage**







20% higher Mileage

# **Compound Technology ProDurable Compound** Achieved higher mileage

max 49% higher Mileage

by optimizing combination of

advanced fillers and flexible rubber

materials

<sup>\*</sup> Based on internal experiments. Results may vary depending on actual environment.

#### **ION** INVOVATIVE TECHNOLOGY

## **EV High Instant Torque grip improved**

# Perfect **Grip**

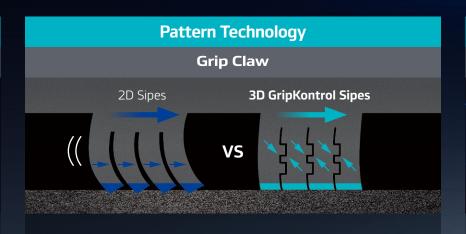




**Profile & Structure Technology** 

Achieved higher grip under heavier loads by optimizing profile design

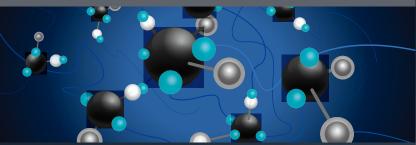
> 20% higher **Cornering Stiffness**



Prevented block distortion in direction of travel by applying advanced 3D Kerfs

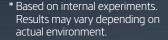
> 3% higher Wet Grip (wet grip  $3\% \uparrow$ , dry grip  $2\% \uparrow$ )

#### **Compound Technology ProGrip Compound**



Achieved higher wet surface grip by combining high-density silica with innovative eco-friendly materials

> max **5%** higher Wet Grip



**iON delivers EXCEPTIONAL GRIP AND HANDLING** even with EV heavier load and high torque.

#### ION INИOVATIVE™ TECHNOLOGY

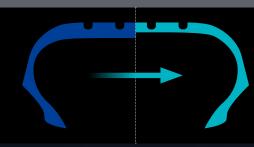
### **Electric Energy Loss reduced**

# Extreme **Lightness**



#### **Profile & Structure Technology**

Power Reserve

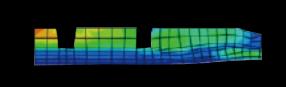


Optimized tire gauge with advanced structure design

4% higher LRR perf. with 4% weight reduction

#### **Pattern Technology**

**Cooling Tread** 

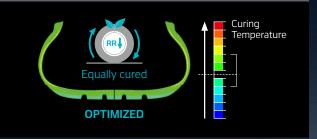


Optimized tread heat through extensive virtual testing

3% higher LRR performance

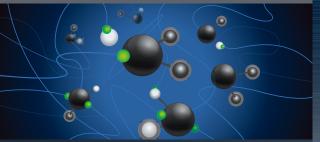
#### **Compound Technology**

**Opti Cure** 



Achieved uniform curing by optimizing curing conditions

#### **ProCoupling Compound**



Improved fuel efficiency by optimizing compounds for higher silica dispersion

max **8%** higher LRR performance

<sup>\*</sup> Based on internal experiments. Results may vary depending on actual environment.

