

March 5, 2021

PRESS RELEASE

KOITO MANUFACTURING CO., LTD.

KOITO's BladeScan[®] Won "JSME Medal for New Technology"



KOITO MANUFACTURING CO., LTD. ("KOITO") (Head Office: Minato-ku, Tokyo; President: Hiroshi Mihara) announces that KOITO's "BladeScan[®]" won "JSME Medal for New Technology" [Award subject: Development and mass production of the Adaptive Driving Beam by scanning method (Development of BladeScan[®])] by "JSME Medals and Awards 2020".

This "JSME Medals and Awards" is given to technologies that have contributed to the Japanese economy by developing breakthrough new products and improving quality / productivity by The Japan Society of Mechanical Engineers (JSME), Japanese largest academic organization, for the purpose of encouraging the development of mechanical engineering in Japan.

This is the first time for KOITO to win this prize.

The award-winning "BladeScan[®]", one of the lamp systems "Adaptive Driving Beam (ADB)", adopted a scanning method that emits LED light to 2 fast-revolving blade mirrors (reflectors) and lights forward vision by using the residual image effect for the first time in the world.

With this new method, by turning on/off 12 LEDs in line with the rotation of blade mirrors, BladeScan[®] ensures high-resolution light distribution equivalent to the use of 300 LEDs and minimizes shading area. The system enables to illuminate vicinity of oncoming vehicles and preceding vehicles or an area between them, and helps driver to early detect crossing pedestrians, thus contributes to reduce traffic accidents.

KOITO is committed to further pursue the cutting-edge technologies and to develop "customer-first" products in order to enhance the safety and comfort of motorization society.

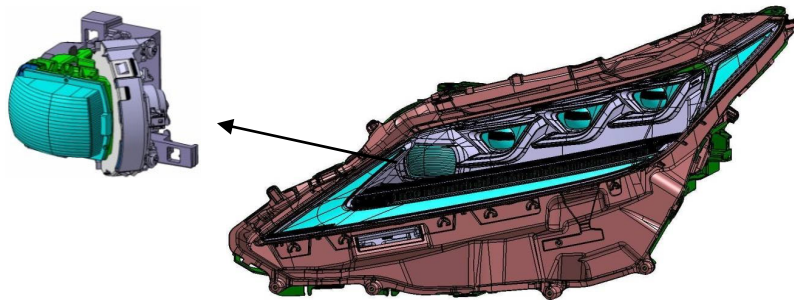
[Outline of the prize awarded to KOITO]

1. Award subject : Development and mass production of the Adaptive Driving Beam by scanning method
2. Winner : Naoki Takii, Satoshi Yamamura, Hidetada Tanaka, Yasuyuki Kato, Kazutoshi Sakurai
3. Description of the development: By turning on/off 12 LEDs and controlling 2 fast-revolving blade mirrors, BladeScan[®] ensures high-resolution light distribution and illuminates vicinity of oncoming vehicles and preceding vehicles while minimizing shading area. BladeScan[®] helps driver to early detect pedestrians, thus contributes to reduce traffic accidents.

※"BladeScan[®]" is a registered trademark of KOITO.

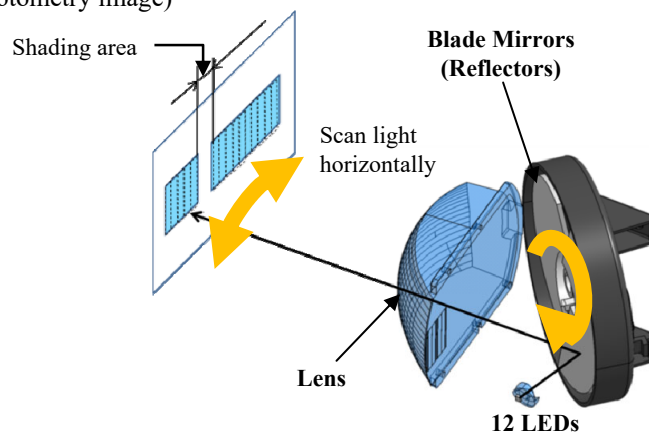
(Reference)

■ BladeScan[®] ADB Unit



■ Principle of BladeScan[®]

(Photometry image)



■ Merit of BladeScan[®]

BladeScan[®] enables driver to detect further pedestrians by illuminating vicinity of oncoming vehicles and preceding vehicles.

<p>【Driver's view】 (BladeScan[®])</p> <ul style="list-style-type: none"> · Drivers can detect pedestrian · Illuminate vicinity of vehicle 	<p>BladeScan ↓ Pedestrian</p>
<p>(Conventional method)</p> <ul style="list-style-type: none"> · Drivers cannot detect pedestrian 	<p>Conventional method</p>
<p>【Aerial view】 (BladeScan[®])</p> <ul style="list-style-type: none"> · Pedestrian further away can be seen 	<p>BladeScan 56m</p>
<p>(Conventional method)</p>	<p>Conventional method 32m</p>