

2021 4Q Financial Results

EARNINGS RELEASE

2021/ 4Q

2022 Feb 8th

Pls download our IR materials from the below page.

- 1) IR Book : (<http://www.seoulviosys.com/kr/ir/data/>)
- 2) Financial Statement : (<http://dart.fss.or.kr>) search code (092190)

Disclaimer

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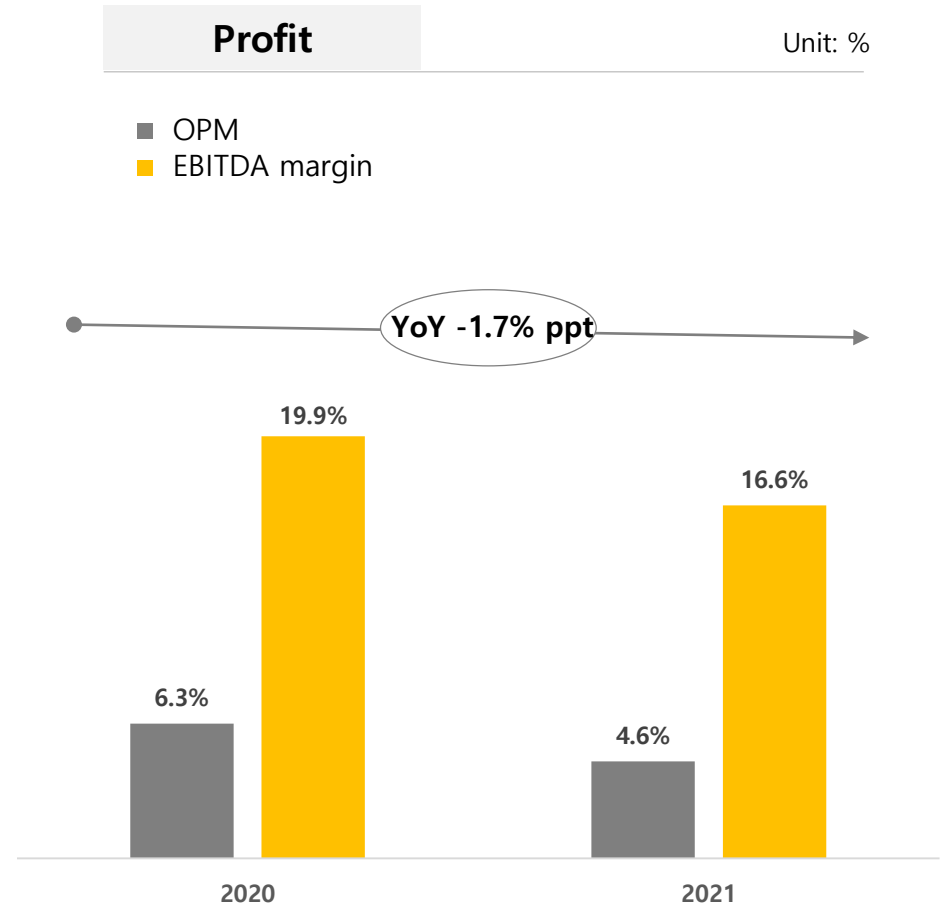
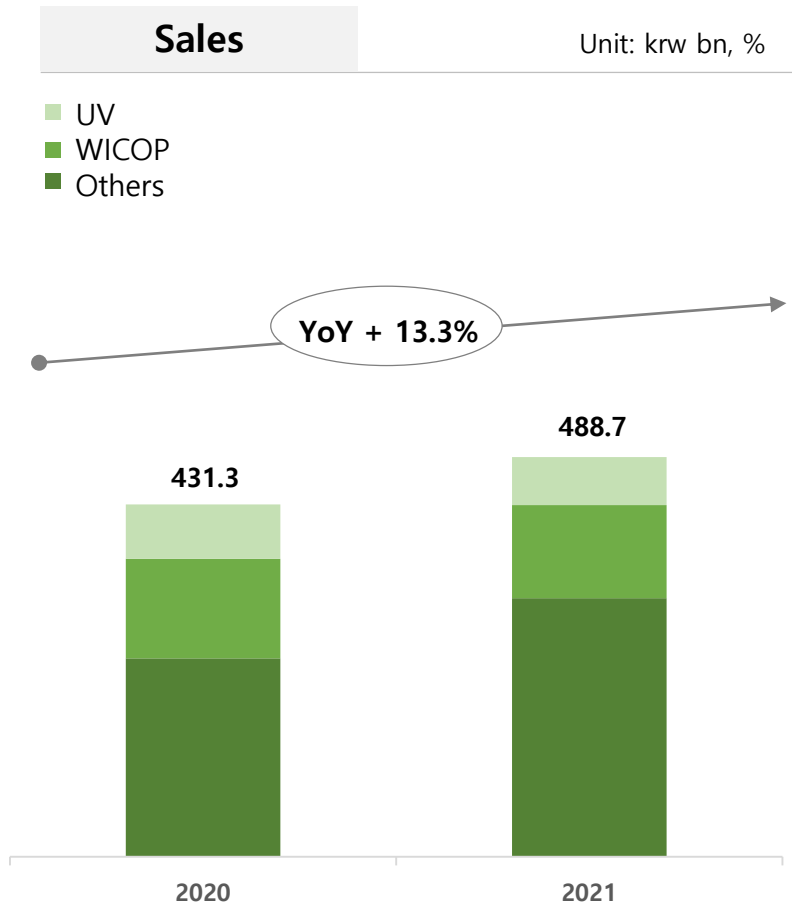
2) Condensed Financial Statement



2021 4Q Financial Results

I. 2021 Earnings _ 1) Yearly Sales and OPM

One-Off costs related to next generation LED products including Micro/Mini LED, lead to 4Q 10.7bn operating income loss



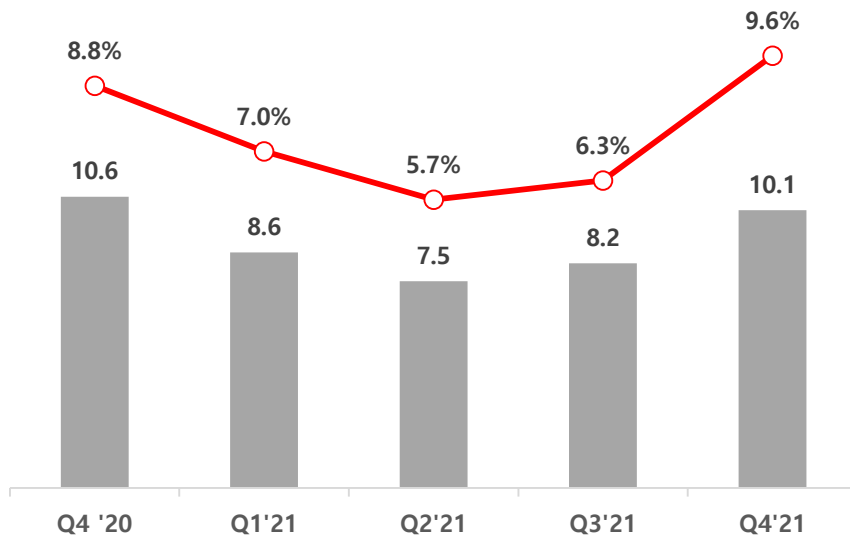
I. 2021 Earnings _ 2) 4Q R&D investment & Expense

Temporary spike in 2nd generation products costs raised R&D investment and SG&A levels

R&D investments

unit: krw bn, %

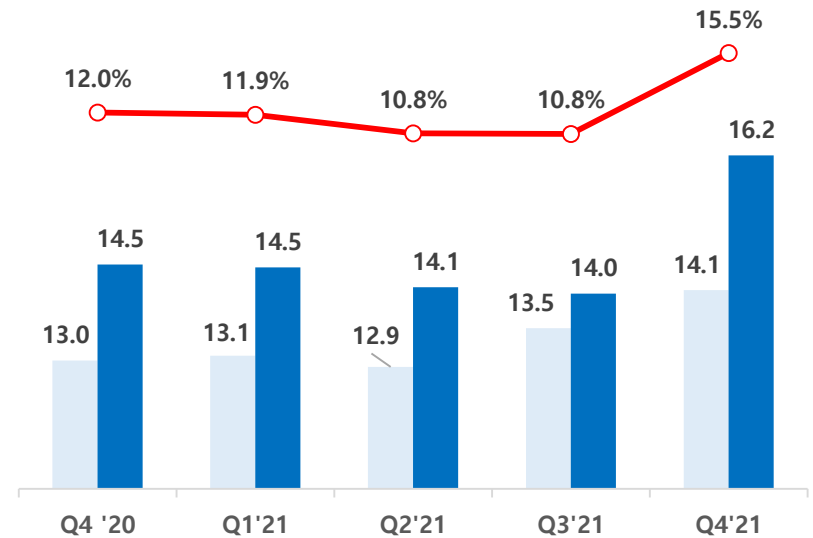
- % of R&D Investments to Sales
- R&D Investments



Expense

unit: krw bn, %

- SG&A
- Depreciation
- % of SG&A to Sales



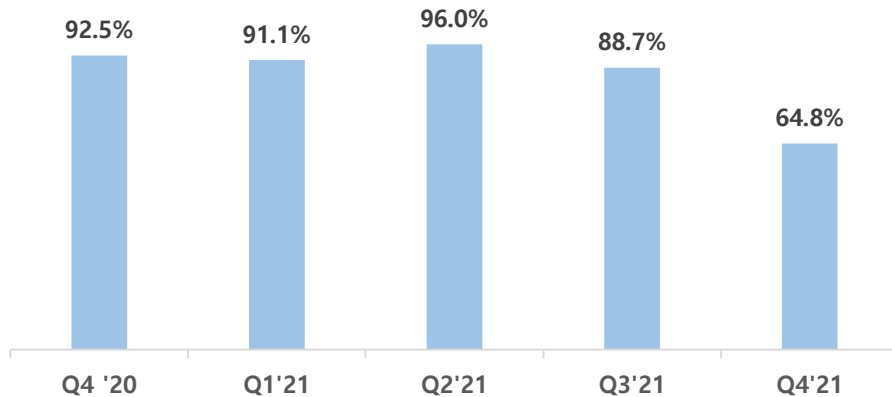
I. 2021 Earnings _ 3) Utilization and CAPEX

Slow IT demand amid low seasonality and sustained global SCM issue lowered utilization rate
 Capex downtrend continues since initial investment spike for 2nd generation product
 (Micro/Mini LED) after 2020 2Q

Utilization Rate

unit: %

■ utilization rate

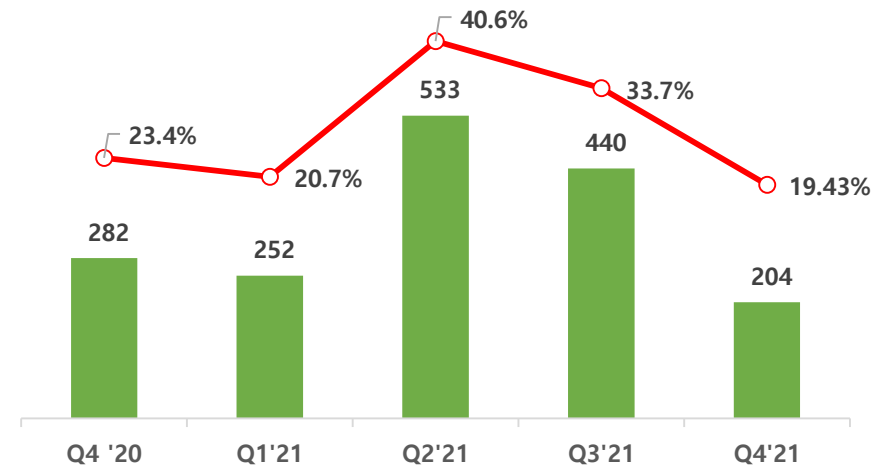


Note) The above production performance index is the average value for the quarter, which is somewhat different from the end of the quarter.

CAPEX

unit: krw bn, %

○ % CapEx to CAPEX
 ■ CAPEX

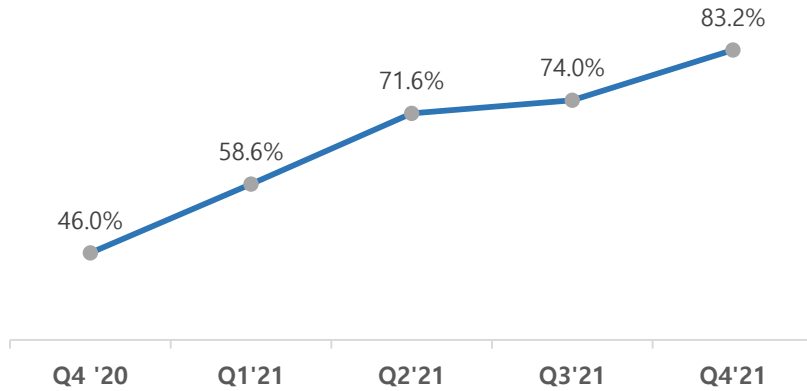


Note) The information contained in this IR report is the result of internal settlement and is subject to change according to outside auditor's review.

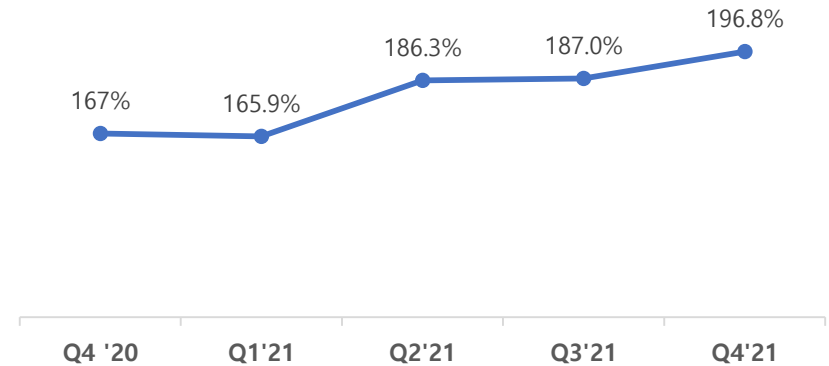
I. 2021 Earnings _ 4) 4Q Financial Ratios

Still maintaining relatively high safety stock level to cope with global SCM issues

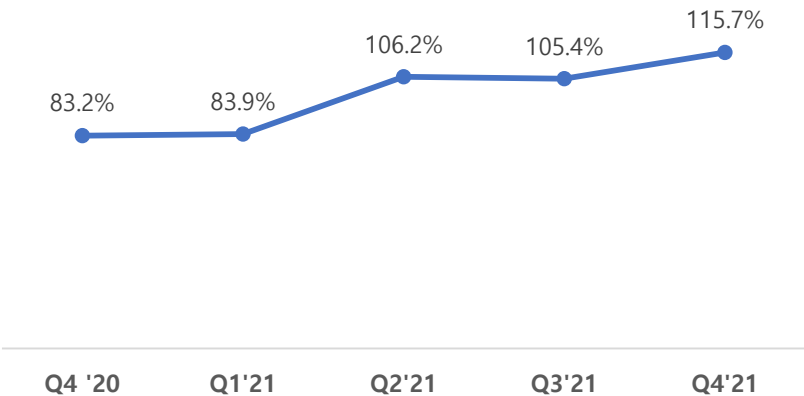
Current Ratio %



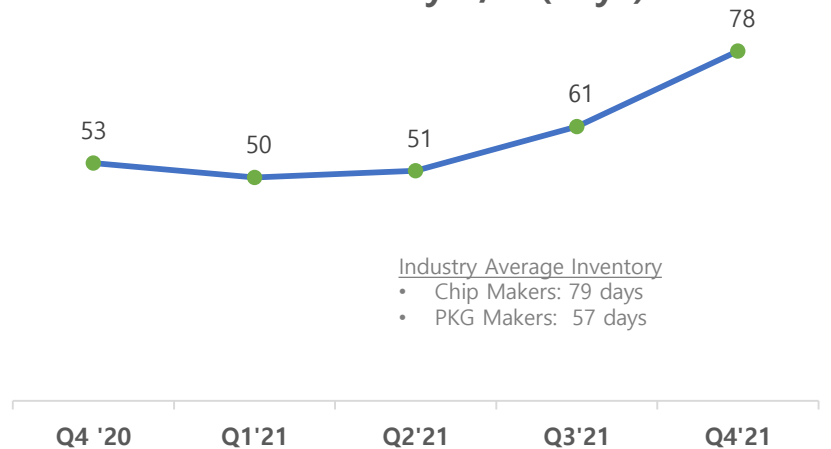
Debt Ratio%



Net Deb Ratio %



Inventory T/O (days)



Industry Average Inventory
 • Chip Makers: 79 days
 • PKG Makers: 57 days

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2022 1Q Guidance

III. 2022 1Q Guidance _ 1) Key Future Growth Momentum

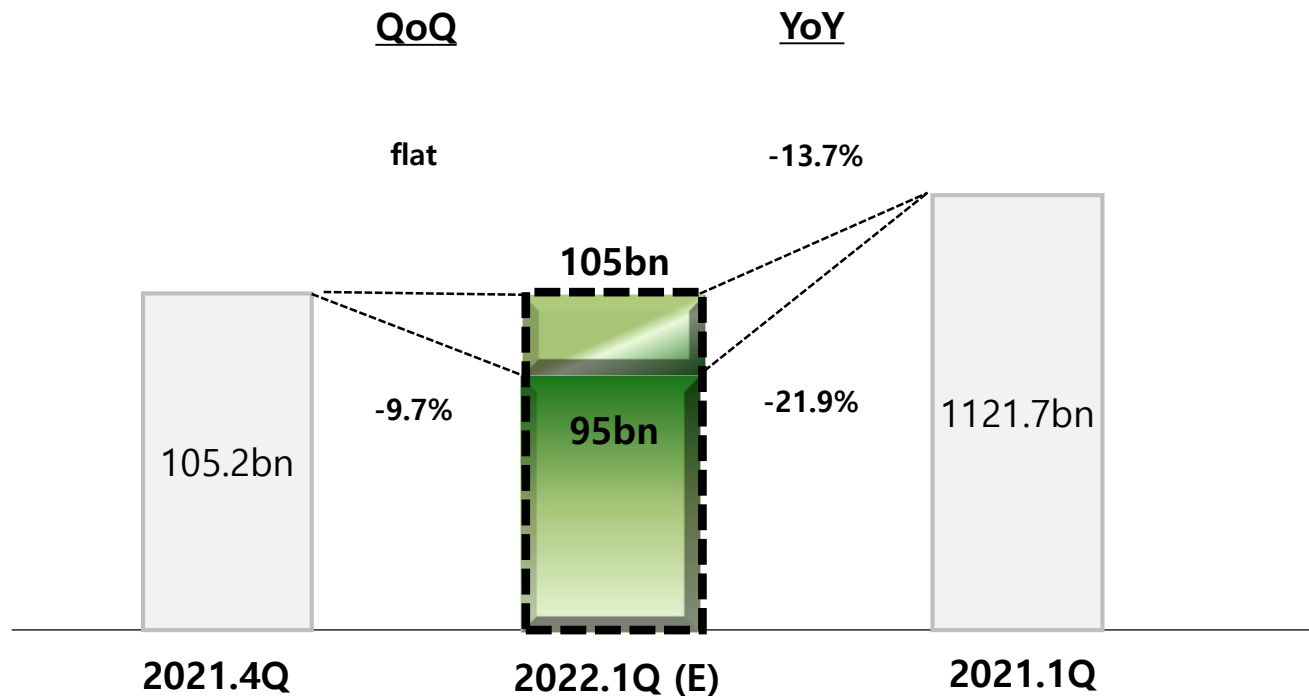
2nd Generation LED products to spark triggering point of LED industry

Application	Key Theme	Technology
<ul style="list-style-type: none">UV	<ul style="list-style-type: none">Virus /Air and Surface Disinfection To continue M/S expansion3D printing curing (280nm~405nm)	Violeds
<ul style="list-style-type: none">Micro LED	<ul style="list-style-type: none">Next Key Patented Technology to replace LCD & OLEDReduces cost to 1/3 + high color uniformityDeveloped 1μm diameter blue & green micro light emitting diode (LED) for AR / VR applications	Micro Clean Pixel
<ul style="list-style-type: none">Chip	<ul style="list-style-type: none">Package-less LED chip revolutionOnly company that covers 200nm ~ 1400nm spectrum of lights (UV to LD)High Level Laser Technology for 5G tele-communication	WICOP

II. 2022 1Q Guidance _ 2) Guidance

Cautiously maintain conservative outlook due to low seasonality and global SCM issues

1Q Guidance





APPENDIX

- 1) WICOP related patent Injunction against 13 brands
- 2) Condensed Financial Statement

III. Appendix_ 1) WICOP related patent Injunction against 13 brands

Global 102 Car Models Use WICOP “Permanent Injunction against 13 Brands”

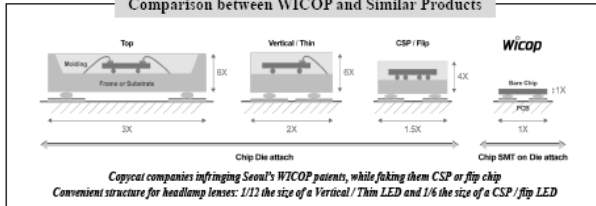
15 enjoined components that are used in 100 models and 7 million sales of global automobile products
Second permanent injunction issued for infringement of WICOP patents: prior injunction was against a Philips brand TV product

ANSAN, South Korea – Seoul Semiconductor Co., Ltd. (“Seoul”), a leading global innovator of LED products and technology, announced that the New Jersey District Court issued a consent judgment and permanent injunction for infringement of twelve Seoul patents against 13 automotive lighting brand LED products being sold through automotive parts’ distribution channels. WICOP is a revolutionary technology that enables a package-less semiconductor. In 2015, WICOP was launched to the world when Seoul’s CEO, Chang Hoon Lee, invited global reporters to Shanghai to launch the new WICOP products.

Seoul Semiconductor’s WICOP Technology Projects

On-going Project	Confirmed Project	Customers	Car Models
182	63	32	102

Comparison between WICOP and Similar Products



WICOP technology has been used in 102 car models and approximately 10% of global automotive lighting products, such as headlamps and running lights. Seoul is leading the development of various 2nd LED technology. As the right-table shows, this injunction judgment follows Seoul’s victories in all 32 patent lawsuits filed in 7 countries or the past 3 years – including permanent injunctions and a recall order of infringing products.

“Intellectual property provides hope for young entrepreneurs and small businesses. But, it is very disappointing that even global, established companies knowingly uses products that infringe others’ patents,” says Seoul’s founder, Chang Hoon Lee. “Intellectual property is an incredible tool that allows people to break through class barriers, enabling small businesses and young entrepreneurs to compete with anyone.”

Since our industrial revolution, the infant mortality rate has declined from 43% to 3%, while access to electricity has increased to reach 83% of total world population and the illiteracy rate has also reduced significantly. So Intellectual property enable to make life more transparent and safer,” added Lee.

The World’s 1st and 2nd Generation LED Technologies of Seoul Semiconductor	Judgment
Violeeds Disinfect virus and bacteria	Permanent Injunction
SunLike Light source for healthy circadian rhythm to match 24-hour body cycles	—
Wicop Light, thin, short and small / Core technology of Mini and Micro LED	Permanent Injunction
Filament Filament LED with similar design to conventional incandescent bulbs	Permanent Injunction / Recall / Destruction
AcricHMUT Easily connectable to 220V for home use with less number of LED	Permanent Injunction / Recall / Destruction
Acrich Driver Connectable to 220V for home use and 20% cost reduction	Permanent Injunction
UCD Phosphor White LED light source with color rendering close to sunlight	Permanent Injunction
Over 10K hour Use 5 years available for 5 hours a day (Up to 10 times longer lifespan than incandescent bulbs)	Permanent Injunction
Over 150 lm/W Electricity cost less than one-tenth compared to conventional incandescent bulbs and one-third of fluorescent lamps	Permanent Injunction / Recall / Destruction

Financial Times

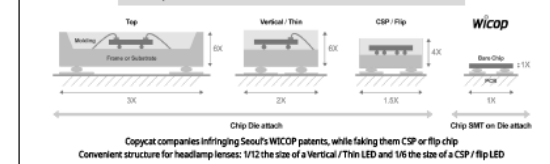
20% of Global TV Display Uses WICOP “Permanent Injunction against 13 Brands”

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Seoul Semiconductor’s WICOP Technology Shipment

Products	Shipment (M unit)	Application (%)
TV	220	20
Tablet	150	27

Comparison between WICOP and Similar Products



bal annual production of 80 million automobiles. It also widely used in display products such as smartphones and tablets, and approximately 20% of 220 million units of global display products based on TV in 2020. WICOP is recognized as a revolutionary semiconductor technology and is essential for production of mini and micro LEDs for an advanced display, and the global mini LED market expects to grow at CAGR of 52% and market revenue of \$1.2 billion in 2022 according to Strategies Unlimited, a global market research leader. Seoul is leading the LED industry with its differentiated 2nd generation technologies based on more than 10,000 patented technology.

As the above table shows, this injunction judgement follows Seoul’s victories in all 32 patent lawsuits filed in 7 countries from 2018 – including permanent injunctions and a recall order of infringing products. “Intellectual property provides hope for young entrepreneurs and small businesses. But, it is very disappointing that even global, established companies knowingly uses products that infringe others’ patents,” says Seoul’s founder, Chung Hoon Lee. “Intellectual property is an incredible tool that allows people to break through class barriers, enabling small businesses and young entrepreneurs to compete with anyone. Since our industrial revolution, the infant mortality rate has declined from 43% to 3%, while access to electricity has increased to reach 85% of total world population and the illiteracy rate has also reduced significantly. So Intellectual property enable to make life more transparent and safer,” added Lee.

The World’s 1st and 2nd Generation LED Technologies of Seoul Semiconductor	Judgment
Violeeds Disinfect virus and bacteria	Permanent Injunction
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Wall Street Journal

III. Appendix_ 2) Condensed Financial Statement

(unit: million KRW)	2021	2021.Q4	2021.Q3	2021.Q2	2021.Q1	2020	2020.Q4	2020.Q3	2020.Q2	2020.Q1	2019
[Income Statement]											
Sales	488,677	105,196	130,551	131,161	121,769	431,282	120,485	120,661	103,235	86,901	350,640
COGS	407,422	99,699	107,192	105,861	94,669	346,704	95,962	98,953	80,728	71,061	280,792
COGS (%)	83.4%	94.8%	82.1%	80.7%	77.7%	80.4%	79.6%	82.0%	78.2%	81.8%	80.1%
Gross Profit	81,255	5,496	23,359	25,300	27,100	84,578	24,523	21,708	22,507	15,840	69,848
Gross Profit (%)	16.6%	5.2%	17.9%	19.3%	22.3%	19.6%	20.4%	18.0%	21.8%	18.2%	19.9%
SG&A	58,926	16,290	14,041	14,145	14,451	57,346	15,559	12,180	16,451	13,155	59,592
Operating Profit	22,329	(10,794)	9,318	11,155	12,649	27,385	9,116	9,528	6,056	2,685	10,256
Operating Profit (%)	4.6%	-10.3%	7.1%	8.5%	10.4%	6.3%	7.6%	7.9%	5.9%	3.1%	2.9%
Pre-Tax Profit	19,600	(13,141)	9,576	9,446	13,719	16,906	3,610	6,297	6,064	935	2,879
Net Profit	21,044	(11,003)	9,273	9,095	13,678	19,647	6,620	6,423	6,451	152	1,454
[Balance Sheet]											
Total Assets	779,260	779,260	783,137	725,153	660,388	582,822	582,822	608,306	602,296	602,907	579,081
Current Assets	222,702	222,702	229,785	221,965	195,876	137,938	137,938	159,526	156,271	156,670	137,985
Cash & Equivalents	9,778	9,778	9,976	10,216	11,763	6,947	6,947	7,522	3,082	5,298	6,272
Inventory	100,304	100,304	96,539	78,999	70,603	64,094	64,094	74,737	74,495	67,714	54,943
Non-Current Assets	556,557	556,557	553,352	503,188	464,512	444,884	444,884	448,780	446,025	446,237	441,096
Total Liabilities	521,733	521,733	510,281	471,872	412,070	363,604	363,604	393,602	392,026	399,443	391,587
Current Liabilities	272,441	272,441	310,603	310,072	334,295	297,607	297,607	276,521	272,065	287,654	274,105
Non-Current Liabilities	249,292	249,292	199,678	161,801	77,776	65,997	65,997	117,082	119,961	111,789	117,481
Total Equity	257,527	257,527	272,856	253,281	248,318	219,219	219,219	214,703	210,270	203,464	187,494

Thank You

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