# Orange Corp.

## A View to the Future

## AI XR High Definition 200 Inches Color Screen



## A Glasses with 6G Video Transmission

The **“Mobile Screen”** for the Wearable Smart Phones

# Co-Founders



**Darwin Hu**
**CEO**



**Aaron Tsai**
**Chief Capitalist**



**Leif Tang**
**Co-Founder**

# Orange Corp. Product development with Three Phases

1. **Orange Corp.** is engaged in Augmented Reality (AR) and Virtual Reality (VR) business and is committed to be the most leading AR glasses provider.
2. Company is to solve the current AR glasses encountered problems and intends to provide a pair of AR glasses initially with affordable and comfortable glasses at unit price **US$129** wearable both indoors and outdoors for general consumer in the mass market.
   - Response with new innovative patented AR Glasses through optics design based on **Polarization Volume Hologram (PVH)** of flat phase lens elements to replace the current waveguide solution.
   - Utilize **single microdisplay Imager** used for binocular vision; light weight and cost down at **1/3** of BOM cost compared with existing AR glasses in the marketplace.
   - Ultra-thin and low cost of planar surface lenses; High optical efficiency, and light weight **less than 35 gram** with volume reduction.
   - **PVH emulating freeform lens** in phase technique to diffract light beams at predefined via **total internal reflection (TIR)**.
   - High optical efficiency - Design and Simulation are proved up to 100% (if double layers of PVH used) to achieve high brightness that is not existing at the marketplace.

❑ **At the first phase**, **Orange Corp.** will focus its own patented PVH (polarization volume hologram) planar thin-film optical lens design and also to use off-the-shelf micro-display imager made by the third-party fastly to develop the low-cost but high performance at **200 inches full color 1920x1080 high resolution** glasses to response the market demands and against those **monochrome (mostly green color)** and **low resolution at 640x480** so called AI glasses providers.

Meanwhile, **Orange Corp.** also provide the equivalent text translation and text reminding application software but more functions. Most AR glasses has two imagers and two optical lenes in pairs, but MAS AVR uses only one single imager microdisplay to split into binocular vision due to innovative and high efficiency PVH optics with patented design, so it is as cut the cost in half as well. This is unique feature.

- **At the second phase** of development, **Orange Corp.** will get into developing our own microdisplay imager chip beyond 1080p such as, 4Kx2K or even 8Kx4K resolution but maintaining at 0,5" and 0,7" diagonal based on own patented imager chip, which had been proved functional feasible previously. As a result, it will further achieve cost reduction at least 1/3 but better price–performance ratio in the competitive arena.

- **At the third phase**: **Orange Corp.** will be stand out among competitor in AR with blessing by over **28 patents.** Company will be further cooperated with its affiliated company, Huaxia Shares Inc. , by applying **patented terahertz (THz) transceiver** for AR, it allows us to have AR glasses design to provide high capacity, high speed, low latency of transmission, facilitating computational offloading and allowing AR glasses to reduce weight, form factors and battery consumption, while remaining immersive and interactive. AR glasses once built-in super-fast THz wireless communication, it goes beyond the existing purely AR/VR business and migrate into whole new world of wearable display communicator to replace mobile phone for MAS AVR in the future.

**3. Conclusion:** We don't build the "me-too" product but response with new innovative patented AR Glasses design through optics of flat phase lens elements and THz transceiver and beyond. This is **Orange Corp. !**

# Orange Corp. Fund Raising Plan

| Issued Amount | Use of proceeds |
| --- | --- |

- **Pre-IPO Run: $3,000,000 :** IPO expense, Make new prototypes, Structural Returns, Market value (TBD) based on IPO share price with conversion in 3x common stock
- **Nasdaq IPO $15,000,000+:** Small volume production, domestic sales
- **2nd Public Offering $100,000,000+:** Mass Production, Global Marketing & Sales

**Nasdaq** or **HKSEX:** Dual Listings

# AR Glasses Face Current Technical Difficulties and Dilemma

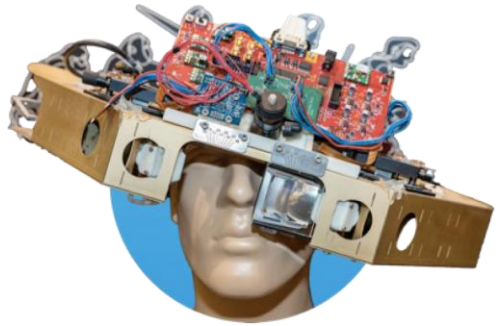
- Painful between indoor and outdoor brightness decision.
- The balance between display resolution and size, weight, and battery.
- Sales volume dilemmas of cost versus market pricing.
- Software shortcomings and the specificity of application scenarios

## Insufficient Brightness for Outdoors Use



- Optical Efficiency Entering Eyes < 15%.
- Diffractive Waveguide < 5%.
- Poor for Outdoor Use !

## Too Heavy & Bulky



- Around 80 grams typically.
- Uncomfortable to wear for a long time.
- Weight should be between 35 ~50 grams .

## Not Clear for Images



- Poor Resolution at 640x480 VGA quality mostly.
- Micro-LED Panel monochrome & few has Color.
- At least 1920x1080 Resolution needed.

## Too Expensive



- Price at $300 to $800 range.
- Beyond general consumers affordable.
- Dominated by enterprises use.

## Lack of Killer S/W




- Lack of Killer application.
- Ecological environment of software development.
- AI might help but not all.

# Orange Corp. Product Features and Unique Solution

**AR Glasses with PVH Optics Unique Feature:**

## High Price-Performance Ratio:

- Innovative optical design, lower production cost, & **1/3** of competitive price.

## Comfortable to Wear:

- Compact design **(~35g)**, wearable without over-loading.

## High Resolution:

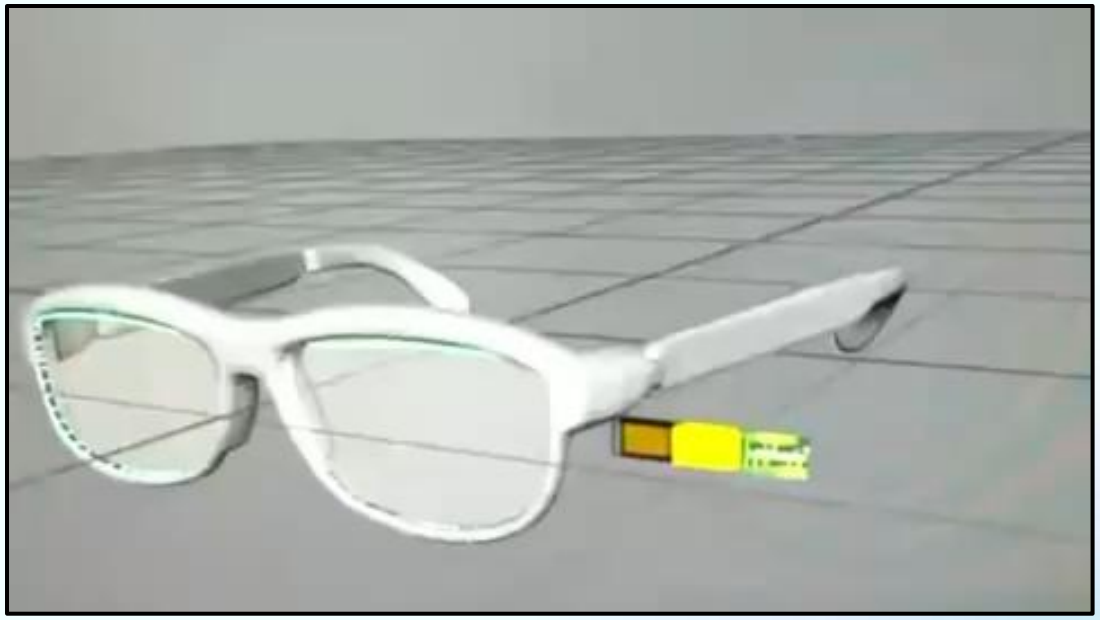
- Resolution at least **1920*1080** up to 4K*4K, providing crystal clear visual effect.

## Wide Viewing Angle:

- Over 55-degree FOV, enhance S/W immersive visual effect.

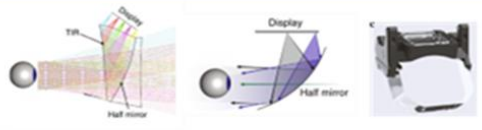
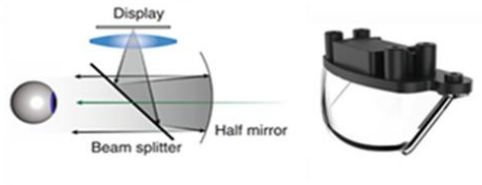
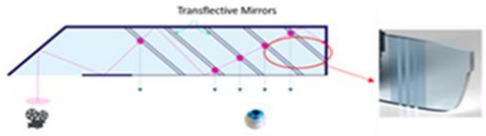
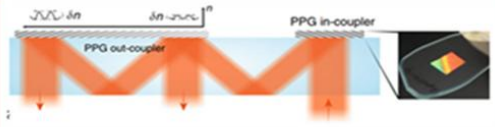
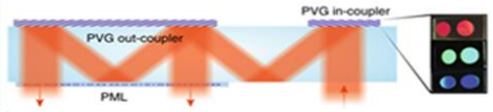
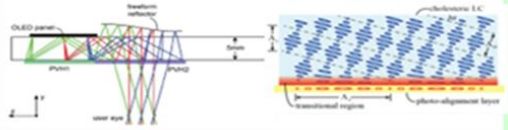
## Outdoor Useful:

- High brightness display, good for daytime **outdoor** use without sunscreen required



- **MicroOLED single microdisplay**
- **Unique PVH planar optics**
- **Optical Efficiency** : **50% -100%**
- **Resolution** : **1920X1080 ~ 4Kx2K**
- **FOV** : **>55° & 180“** diagonal
- **Thickness** : **3 mm**
- **Eye Box** : **12*9mm**
- **MSRP Price : $99.00 ~ $129.00**

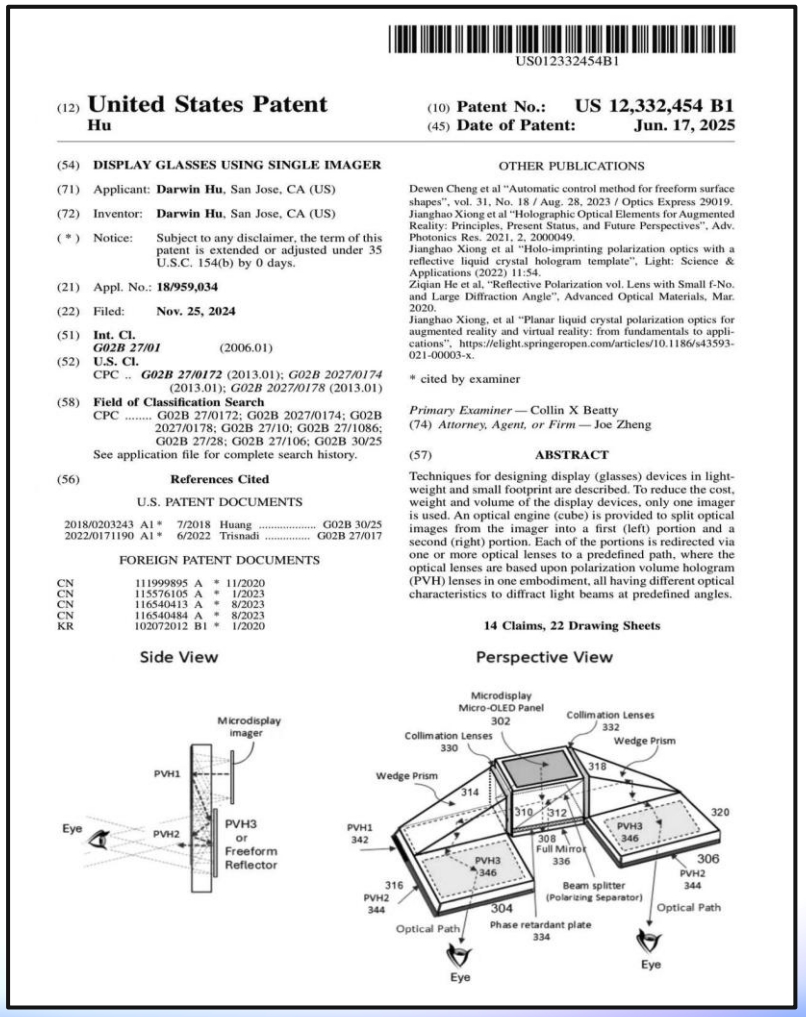
# Present Optics Design of AR Glasses Comparison

| | Optical Engine Design | | Optical Efficiency % | Color | Volume | FOV | Eye Box | Weight | Mass Production |
|---|---|---|---|---|---|---|---|---|---|
| 1. | Freeform Curved Reflector/Prism<br>自由曲面反射棱镜 |  | 20~40% | Good | >10 | 50°~120° | 12×9mm | Bad | Medium |
| 2. | Bird-Bath (BB)<br>鸟澡盆 |  | 15~20% | Good | 20~30 | 50°~120° | 12×9mm | Bad | Medium |
| 3. | Geometric Array Waveguide<br>几何阵列波导 |  | ~15% | Good | ~2 | ~40° | 10×5mm | Medium | Bad |
| 4. | Surface Relief Gratings (SRG)<br>表面浮雕光栅 |  | 1~3% | Medium | 1~2 | ~52° | (16~19)×(12~16)mm | Good | Medium |
| 5. | Volume Holographic Gratings (VHG)<br>体全息光栅 |  | 1~3% | Low | 1~2 | ~35° | 13×12mm | Good | Medium |
| 6. | Polarization Volume Gratings (PVG)<br>偏振体全息光栅 |  | 1~3% | Medium | 1~2 | ~55.3° | 18×17 mm | Good | Good |
| 7. | Polarization Volume Hologram (PVH)<br>(Freeform Emulation)<br>偏振体全息图 (仿真自由曲面) |  | 45~90% | Good | 3~5 | 54° | 12x9 mm | Good+ | Excellent |

# US Patents for AR Glasses with PVH Optics

## US Patent 12,332,454 - Jun. 17, 2025

## "Display glasses using single imager"



US012332454B1

(12) **United States Patent**
**Hu**

(10) **Patent No.: US 12,332,454 B1**
(45) **Date of Patent: Jun. 17, 2025**

(54) **DISPLAY GLASSES USING SINGLE IMAGER**


(71) Applicant: **Darwin Hu**, San Jose, CA (US)

(72) Inventor: **Darwin Hu**, San Jose, CA (US)



( * ) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **18/959,034**

(22) Filed: **Nov. 25, 2024**

(51) **Int. Cl.**
***G02B 27/01*** (2006.01)

(52) **U.S. Cl.**
CPC .. ***G02B 27/0172*** (2013.01); *G02B 2027/0174* (2013.01); *G02B 2027/0178* (2013.01)

(58) **Field of Classification Search**
CPC ..... G02B 27/0172; G02B 2027/0174; G02B 2027/0178; G02B 27/10; G02B 27/1086; G02B 27/28; G02B 27/106; G02B 30/25
See application file for complete search history.



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Jianghao Xiong et al "Holo-imprinting polarization optics with a reflective liquid crystal hologram template", Light: Science & Applications (2022) 11:54.
Ziqian He et al, "Reflective Polarization vol. Lens with Small f-No. and Large Diffraction Angle", Advanced Optical Materials, Mar. 2020.
Jianghao Xiong, et al "Planar liquid crystal polarization optics for augmented reality and virtual reality: from fundamentals to applications", https://elight.springeropen.com/articles/10.1186/s43593-021-00003-x.

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*Primary Examiner* — Collin X Beatty
(74) *Attorney, Agent, or Firm* — Joe Zheng


(57) **ABSTRACT**


Techniques for designing display (glasses) devices in light-weight and small footprint are described. To reduce the cost, weight and volume of the display devices, only one imager is used. An optical engine (cube) is provided to split optical images from the imager into a first (left) portion and a second (right) portion. Each of the portions is redirected via one or more optical lenses to a predefined path, where the optical lenses are based upon polarization volume hologram (PVH) lenses in one embodiment, all having different optical characteristics to diffract light beams at predefined angles.


**14 Claims, 22 Drawing Sheets**

Side View

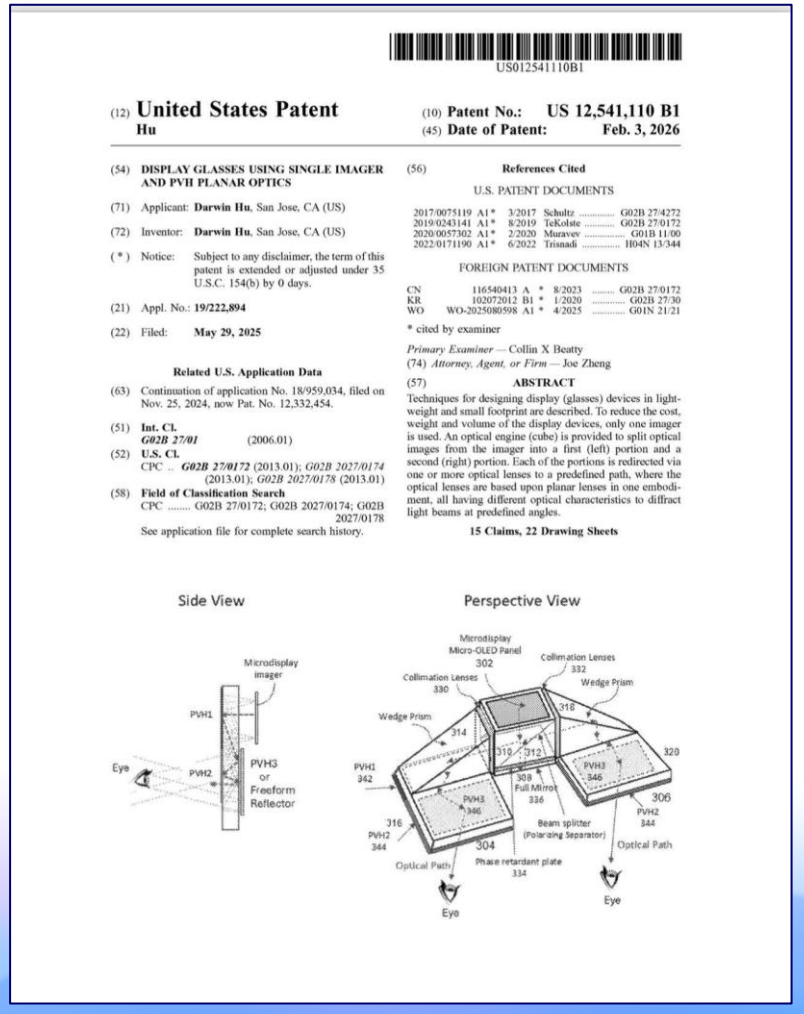



Perspective View




## US Patent 12,541,110 – Feb. 3, 2026

## "Display glasses using single imager and PVH Planar Optics"



US012541110B1

(12) **United States Patent**
**Hu**

(10) **Patent No.: US 12,541,110 B1**
(45) **Date of Patent: Feb. 3, 2026**

(54) **DISPLAY GLASSES USING SINGLE IMAGER AND PVH PLANAR OPTICS**


(71) Applicant: **Darwin Hu**, San Jose, CA (US)

(72) Inventor: **Darwin Hu**, San Jose, CA (US)



( * ) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **19/222,894**

(22) Filed: **May 29, 2025**

**Related U.S. Application Data**

(63) Continuation of application No. 18/959,034, filed on Nov. 25, 2024, now Pat. No. 12,332,454.

(51) **Int. Cl.**
***G02B 27/01*** (2006.01)

(52) **U.S. Cl.**
CPC .. ***G02B 27/0172*** (2013.01); *G02B 2027/0174* (2013.01); *G02B 2027/0178* (2013.01)

(58) **Field of Classification Search**
CPC ..... G02B 27/0172; G02B 2027/0174; G02B 2027/0178
See application file for complete search history.



(56) **References Cited**

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CN 116540413 A * 8/2023 ..... G02B 27/0172
KR 102072012 B1 * 1/2020 ..... G02B 27/30
WO WO-2025080598 A1 * 4/2025 ..... G01N 21/21

* cited by examiner



*Primary Examiner* — Collin X Beatty
(74) *Attorney, Agent, or Firm* — Joe Zheng


(57) **ABSTRACT**


Techniques for designing display (glasses) devices in light-weight and small footprint are described. To reduce the cost, weight and volume of the display devices, only one imager is used. An optical engine (cube) is provided to split optical images from the imager into a first (left) portion and a second (right) portion. Each of the portions is redirected via one or more optical lenses to a predefined path, where the optical lenses are based upon planar lenses in one embodiment, all having different optical characteristics to diffract light beams at predefined angles.


**15 Claims, 22 Drawing Sheets**

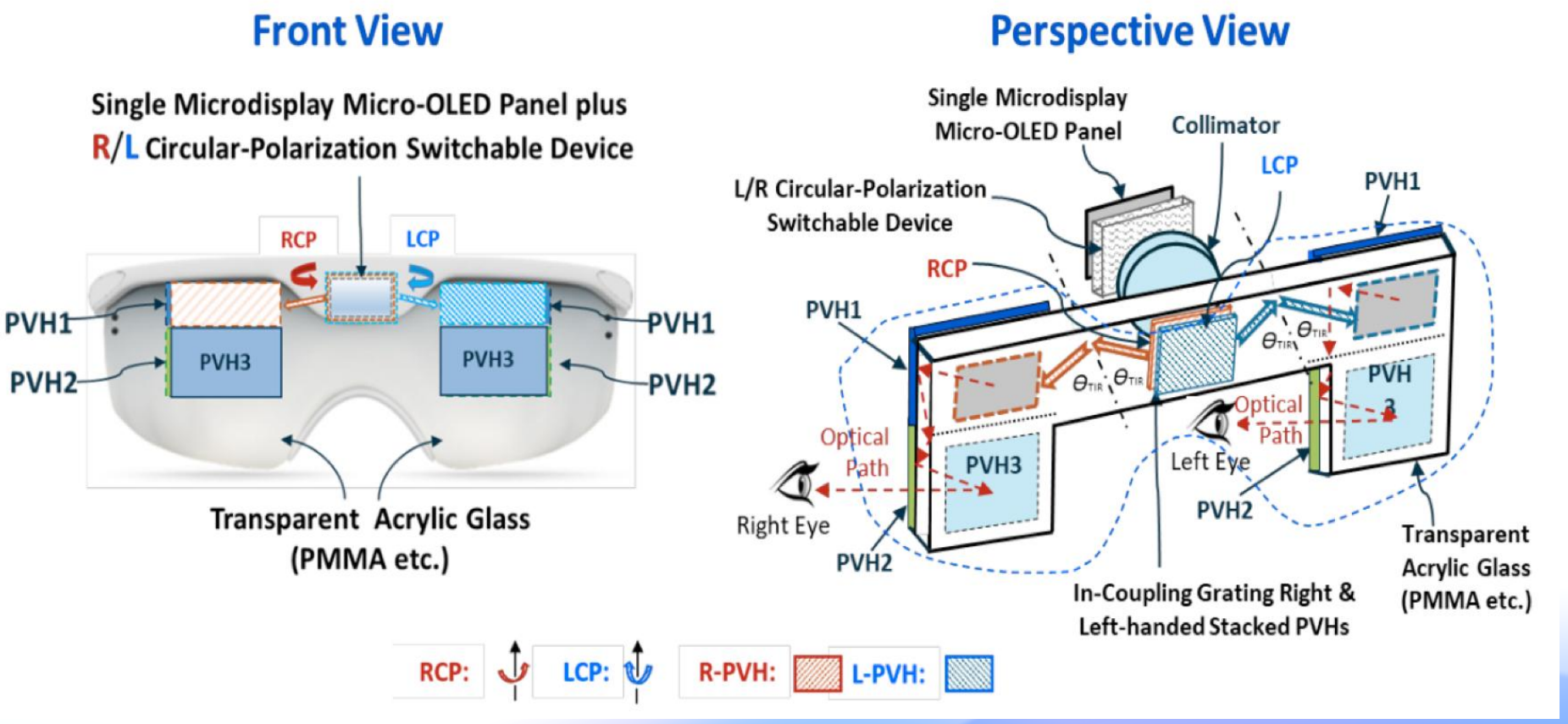
Side View




Perspective View

# Realization of Binocular Display with Single Panel and PVH Planar Optics

## One single microOLED and PVHs optics for binocular vision with 2D/3D Selectable).



# Display Glasses Patents Awards

## Dawin Hu's invention patents:

**Darwin Hu , as co-founder, who holds over 100 invention patents in the United States, China, Japan, South Korea, Germany, France, and other countries.**

**This includes a cross-disciplinary range of high-tech products, such as: LED backlight patents for LCD displays sold to Microsoft, LCoS microdisplays, spatial light modulators SLM's phase and oscillation modulation, metamaterial planar optics and LCD lenses Meta-Surface & LC lenses, CMOS sensors and imaging scanning, image typesetting and printing, Micro-LED printers and multifunction printers (MFP), projection displays and image processing, and core AR/VR smart glasses components.**

**The latest terahertz THz transceiver converters, among others. Several of these patents have been resold and licensed for use, including patents for LCD backlighting and under-display fingerprint recognition for display panels.**

## Invention patents still owned today:

1. Display image digital signal processing : **5 items**
2. Innovative design and system application of meta-surface material optical components: **2 items**
3. Spatial light modulator design and 3D holographic display with amplitude and phase modulation: **5 items**
4. **AR/VR/XR glasses technology : 24 items**
   - **United States USA: 13 items**
   - **China: 6 items**
   - **India: 5 items**
5. Laser projection and automotive Technology: **2**

**Total # invention patents: 36 Items**



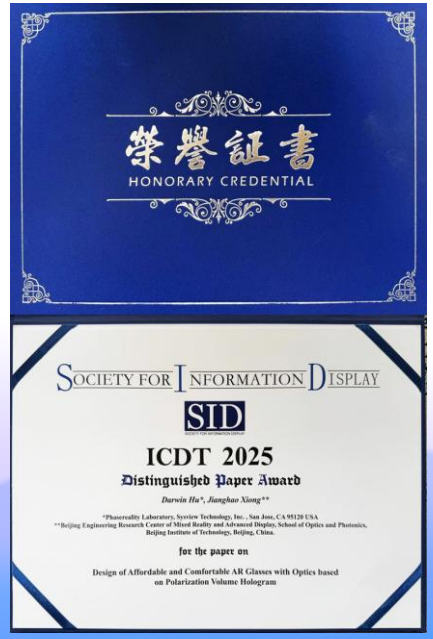

## ICDT 2025 SID-China

**Paper Presented at AR/VR/MR & Metaverse Session:**
**Dated March 24, 2025**

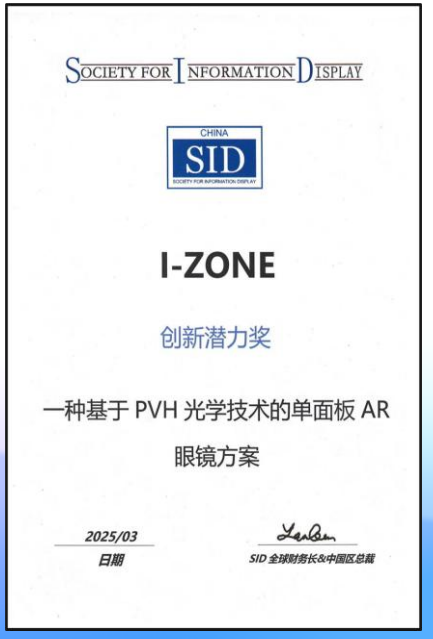
**“ Design of Affordable and Comfortable AR Glasses with Optics based on Polarization Volume Hologram ”**

https://doi.org/10.1002/sdtp.18803

## Distinguished Paper Award



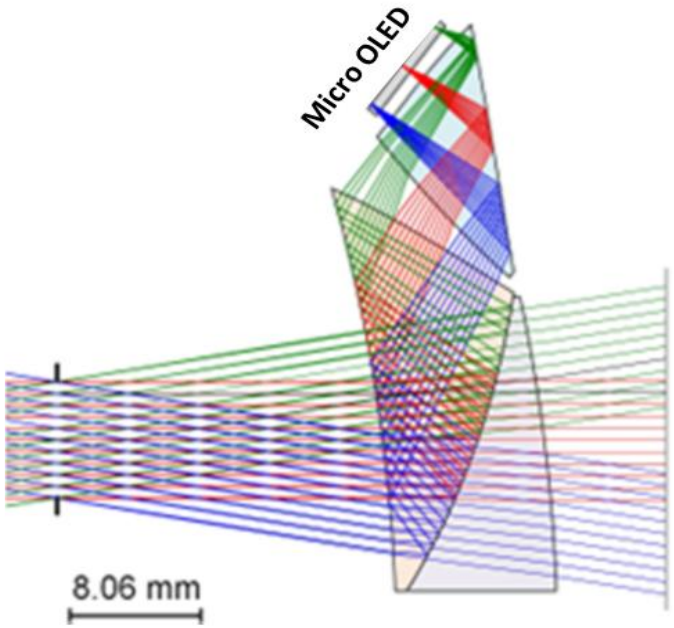

## Innovation Potential Award



# Company's AR Glass Design Based on PVHs Optics with Freeform Simulation

## Desired Parameters & Performances of AR Optical Imaging and Architecture

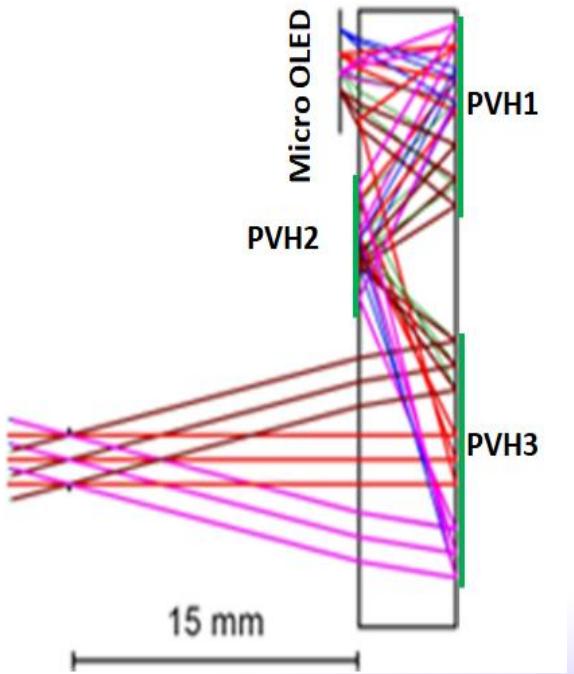
**Original Freeform Optics**




(a) Freeform prism-based design

| Parameter | Specification |
|---|---|
| Substrate thickness | < 5mm |
| MicroOLED panel | 16×9 mm |
| Efficiency | > 40% |
| FOV | > 54° |
| Eye relief | > 15 mm |
| Eye box | > 6 mm |

**New PVH Optics**



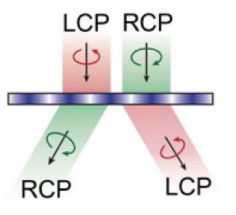

(b) PVH-based design

# Technological Breakthrough & Innovation

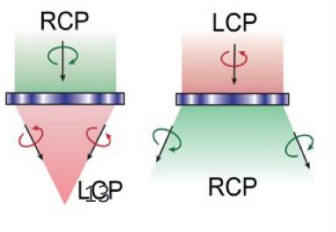
## What is (PVH) ?

- **Transmissive:** Based on **Geometric Phase** or **Pancharatnam-Berry Phase**, Commonly called **PBOE** (called **PBL** for lens) or **GPOE** (called **GPL** for lens)

**Transmissive Grating：**



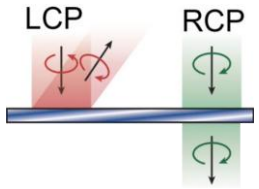

**Transmissive Lens：**



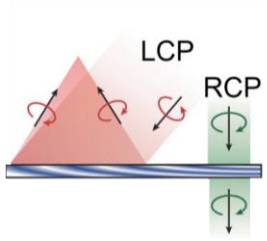

- **Reflective：**

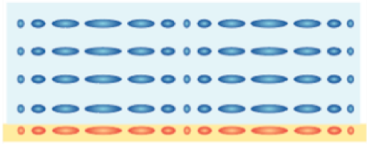
**Reflective Grating：**

(Commonly termed as PVG
Polarization volume grating)




**Reflective Lens：**

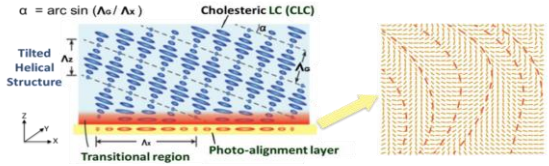


PBOE (PBL for lens) or GPOE (GPL for lens)

~2000 ~2017 ~2020 ~2023 2025 LCPH

- ~2017: •CLC can form the grating device named as PVG
- ~2020: •Lens-type, called PVL
- ~2023: •Freeform-type, called PVH (general)




The Structure of PVH

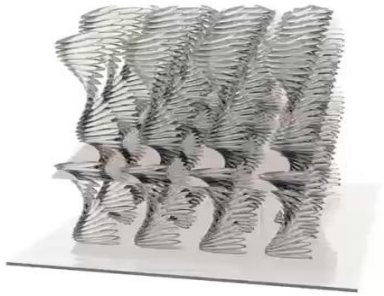


Freeform Wavefront Pattern

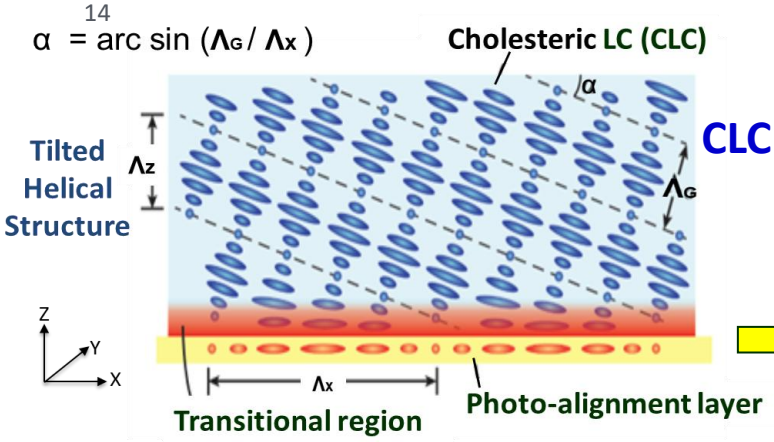
1) The **Photo Alignment Material** & **Liquid Cystal (LC)** are the core characteristic of such devices.
2) The **transmissive device does not possess the volume structure** but also has **polarization dependency.**
3) **Both** reflective and transmissive devices accommodate arbitrary wavefront functionality。

# PVH Optics Design Technique and Principle

- To use polarization volume hologram **(PVH)** in traditional **TIR-**based geometric combiner to combine advantages:
  1) **Compactness & Planar Thin Film Phase Mirror.**
  2) **Low Cost** & **High Image Quality.**
  3) **Photoalignment Layer (20 nm) and Cholesteric Liquid Crystal (CLC) Layer (1-3 μm).**
  4) **Chiral Polarization and Volume Holograms (Bragg Diffractive Law: $n\lambda=2d\sin\theta$).**



**3D Modeling CLC**




**The Structure of PVH**



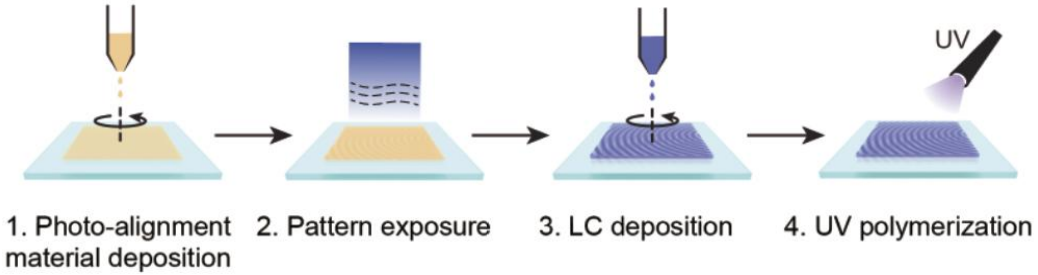

**Freeform Wavefront Pattern**

**PVH as newly emerging optical device:**

1. **Ultra-thin thinness** (~μm)
2. **High efficiency** (large δn)
3. **High freedom** (freeform)
4. **Low cost** (film deposition)

# PVH Optics Fabrication - Deposition & Exposure

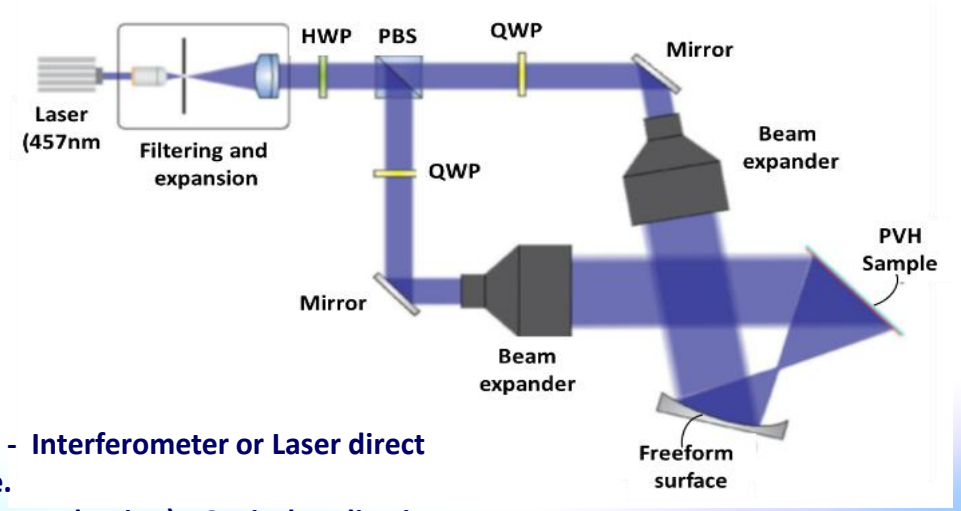
## (A) Film Deposition Methods:




(Lab) - Spin coating Brilliant Yellow (BY) solutions, PD1 from Photon Dynamics or RN4942 from Nissan Chemical.

(Mass Production) - Slot-die, Spray-coating, Dip-coating, Inkjet printing…etc.

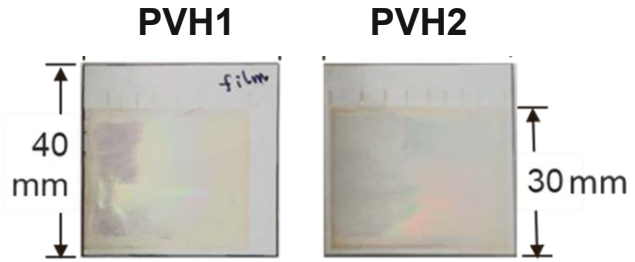
## (B) Diagram of Exposure Interferometer Setup:

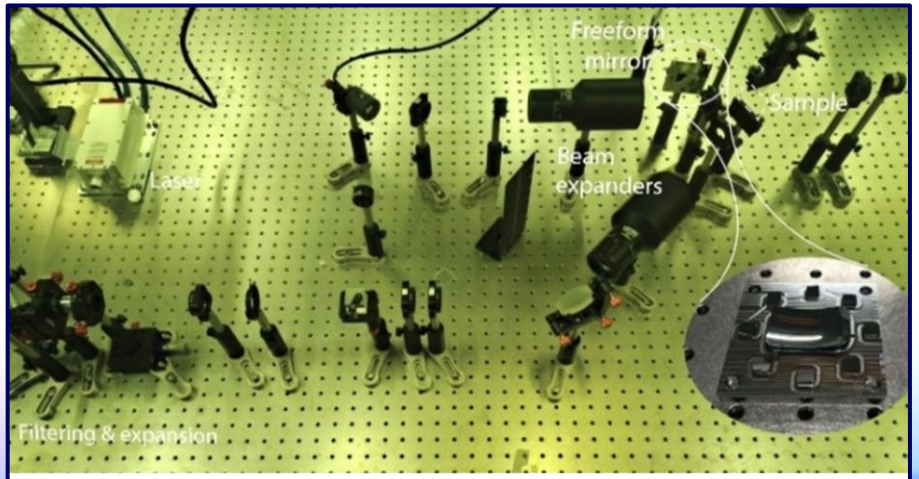



(Lab) - Interferometer or Laser direct write.

(Mass Production) - Optical replication.

## (c) Engineering Prototype of PVH Samples:




Physical Setup in Laboratory

# Background and Significance

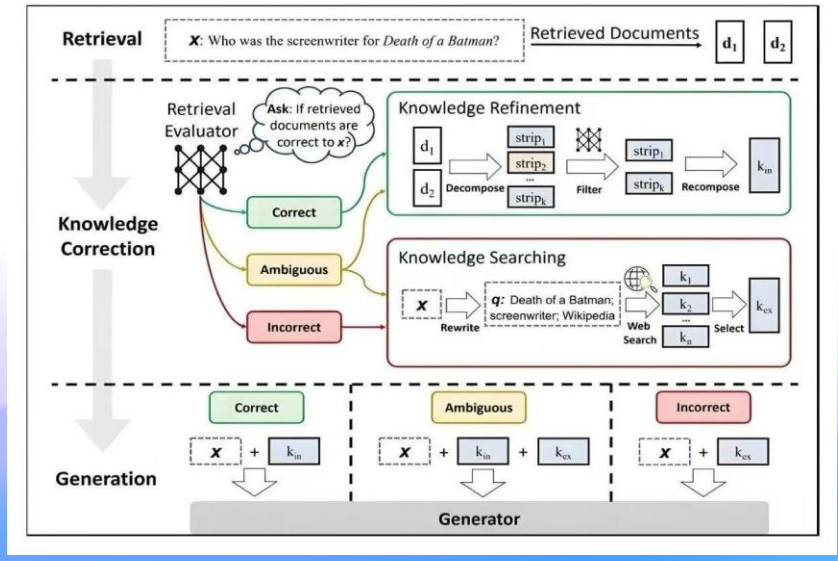
1. LLM is booming and might be the next generation of human-machine interactive platforms.
2. Digital image rendering interacts with nature at real-time has become a highly promising development.
3. Augmented Reality Technology has become a truthful candidate of reality.
4. AI + AR glasses play a strategic role and might become “The Gateway to the Metaverse and the Core of the Digital Economy”.
5. AR glasses with single micro-display with PVH optical design for binocular vision  will have answer!.
6. Orange Corp. will heavily promote AR technologies with PVH in consumer market and aim for supply chain developed and upgraded.
7. AR lasses + THz communication of space, air and earth all in one.

## Big Corporation Strategy

Vision Pro · Meta · oculus · SONY · Google · Microsoft · HUAWEI · ByteDance · 雷鸟创新 · Rokid · xreal · PICO · SAMSUNG · magic leap · Qualcomm · Lenovo · xiaomi · Alibaba Group 阿里巴巴集团

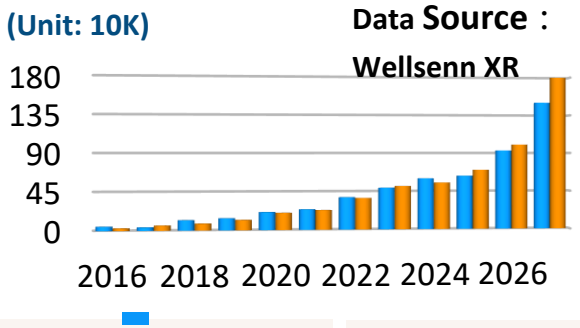
## Large Language Model (LLM)

NVIDIA · Grok · Gemini · OpenAI · AI · deepseek · 文心一言



# Market Space and Development

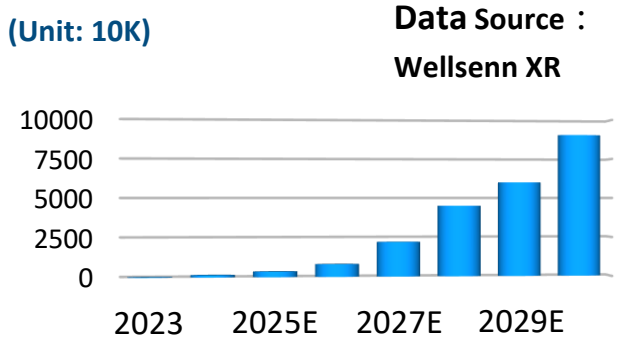
## AR Glasses Global Shipments



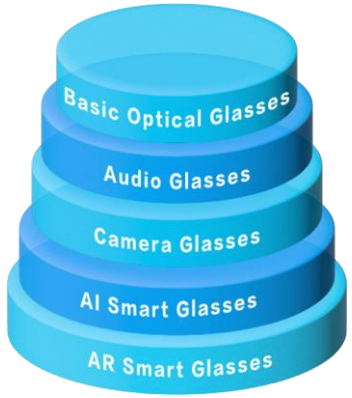

Huaxi Securities Research Institute

Ping An Securities Research Institute

## AI Glasses Global Shipments




## Market Space and Glass Migration




I. Basic Optical Glasses: 基础光学眼镜

II. Audio Glasses = Optical Glasses + Audio Module
基础眼镜+音频模块

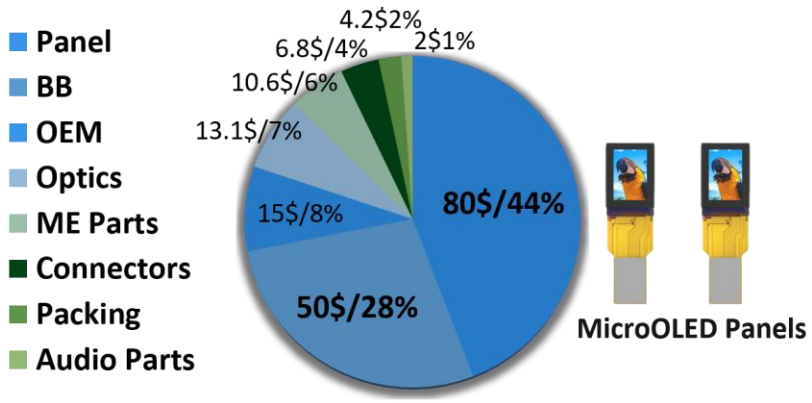
III. AI Glasses = Optical Glasses + Audio Module + Camera 基础眼镜+音频模块+摄像头

IV. AR smart glasses: AR 智能眼镜

- According to the “World Report on Vision” released by the World Health Organization, more than 2.2 billion people worldwide are visually impaired or blind, accounting for approximately 28% of the global population, with myopia being the main cause.
- According to data collation and forecasts from Wellsenn XR, in 2023, conventional optical lenses totaled approximately 1.56 billion units, with a market size of 150 billion US dollars. By 2033, it is expected to reach around 2 billion units with a market size of 200 billion US dollars.
- Current AI glasses are only a transitional, temporary solution, featuring a monochrome 640x480 VGA resolution.
- After 2030, as AI+AR technology matures, the AI+AR smart glasses industry is expected to enter a period of rapid development. According to Wellsenn XR projections, by 2035, AI+AR smart glasses will eventually replace traditional smart glasses, achieving a penetration rate of 70%. Global sales of AI+AR smart glasses will reach 1.4 billion units, comparable to the scale of smartphones, and they will become the next-generation general computing platform and terminal.
- In other words, AR glasses will still require 8 to 10 years of effort to achieve all-day wearability and sales volumes comparable to today’s mobile phones.
- **Unless breakthrough technologies emerge that simultaneously deliver lightweight design, high resolution, low cost, and ease of manufacturing – such key technologies would completely groundbreaking the current paradigm.**

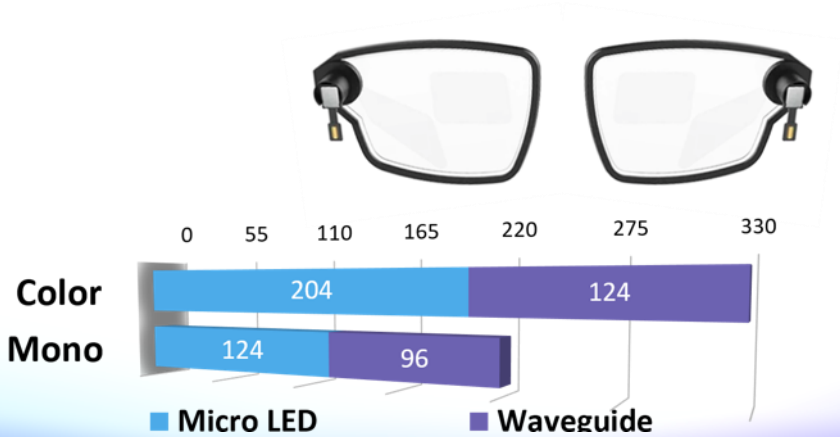
# BOM Cost Comparison

## 1. BB Optics with Optical Engine : ~$130




Hua Wei Vision Glass Cost Structure : $180.90
(Source : Wellsenn XR)

## 2. SRG Optics : $220-328




## 3. PVH Optic Cost : around $35.00

Single Panel cut cost 50%

Self-Produced : $20

Out-Sourcing : $40

**PVH Planar Lens : $15**



- **Optical Modules cost : $35-55**

  including electronic controller, display chip and ME parts.

- **Overall System targeting BOM cost: est. $65.00 ~$75.00**

- This business is to have AR glasses to meet the consumer's need for lightweight and practically wearable to fill the gap in the market, to drive AR glasses in volume of demands and to promote the relevant industrial supply chains of future development and upgrades.
- AR glasses with innovative PVH Optics associated with availability of material and component parts and laboratory requirements are much convenience and good acess related to supply chains fully aligned with industries in Shenzhen region.
- For mass-production, Shenzhen is an excellent location to recruit talented technical people no matter manufacturing key members or experienced R/D engineers in the area as well as alternatively to use contract-manufacturing during Company at start-up phase.

# Finance in Two Phases

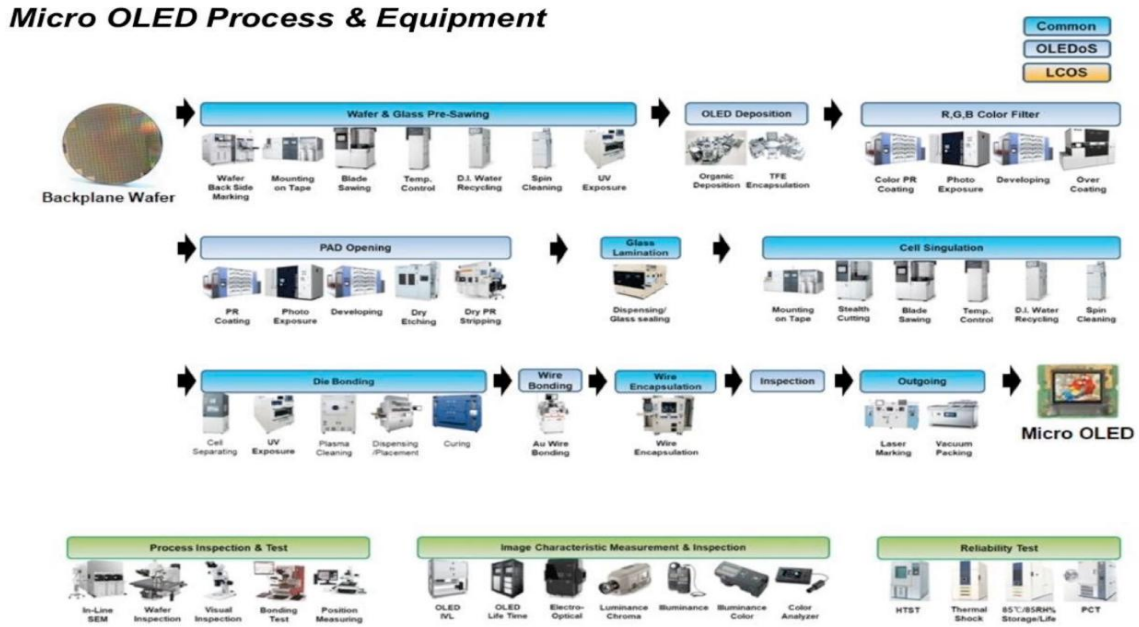
**Fund Raising Split in Two Phases:**

**1.Pre-IPO Run: $3M US dollars.**

- **Used for Nasdaq IPO and complete prototype samples.**

**2.IPO Run: $15 million US dollars.**

- **Mainly used to purchase instruments and equipment to complete the pilot-production / manufacturing, optimization of PVH optics production lines, sales/marketing, Intellectual properties/legal, administration and operational expenses**




**The picture above is the second step of planning.**

1. **In the early stage, the company adopted the contract manufacturing strategy for the system product and modules to produce one million pairs of smart glasses to enter the market first.**
2. **After the market volume grown up, it will be gradually establishing own Micro-OLED and LCOS panel factories to further improve profits and yields.**

# Marketing Sales & Finance

❖ **Five Years Financial Projection with Revenue, Cost Analysis, Production Capacity, Sales Volume and Selling Price:**

| Year 年份 | Yearly Production 年产量（万套） | Driver not included 不含驱动额（$M） | Driver included 含驱动销额（$M） | Driver not included Cost 不含驱动成本总额（$M） | Driver included Cost 含驱动成本总额（$M） | Driver not included Profit 不含驱动利润（$M） | Driver included Profit 含驱动利润（$M） |
|---|---|---|---|---|---|---|---|
| 1st Year (Preparation) | Assumption: Monthly Average~1000 Wafers, Yield Rate: 80-90%, EST. Monthly Shipment: 100K Optical Engine or Modules, Capacity gradually increased yearly ~ 30% - 50%, OE Cost/S around $35/Set & Driver Cost around $35/Set. Selling Price (Not included Driver) at $68/unit & If driver included, selling Price is $128/unit. | | | | | | |
| 2nd Year 月产500片流片 | 60 | 40.8 | 76.8 | 21 | 42 | 19.8 | 34.8 |
| 3rd Year 月产800片流片 | 96 | 65.28 | 122.88 | 33.6 | 67.2 | 31.68 | 55.68 |
| 4th Year 月产1000片流片 | 120 | 81.6 | 153.6 | 42 | 84 | 39.6 | 69.6 |
| 5th Year 月产1200片流片 | 144 | 97.92 | 184.32 | 50.4 | 100.8 | 47.52 | 83.52 |

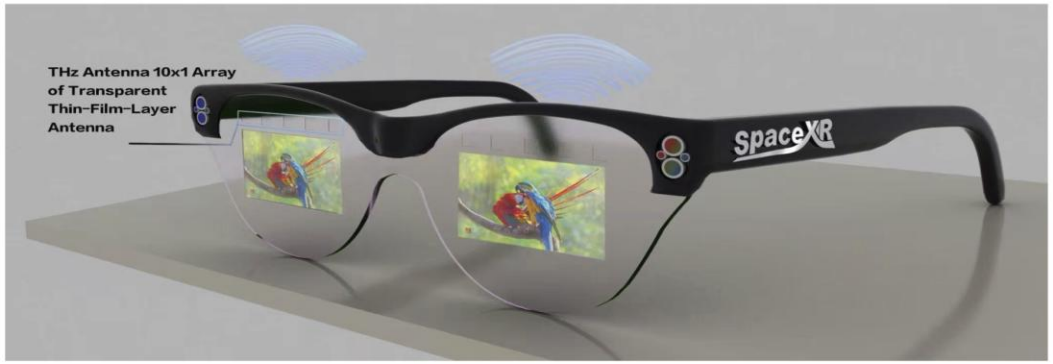
1. **Market Size:** The AR glasses market size is expected to exceed $300 billion US dollars by 2030.
2. **Cost Analysis:** Through technological innovation and large-scale production, production costs are effectively reduced and profitability is enhanced.
3. **The total investment of the Project :** 25 million US dollars with two rounds – 1. Seed Round (种子轮) and 2. Angel Round (天使轮)
4. **Assumption:** Cost and Selling Price referred to above Table
5. **Return on Investment:** Both payback periods are less than 1.5 years, the capital turnover efficiency is extremely high, and the recovery period including driving scenarios is shorter (only about 8.5 months).
6. **Projected Sales Revenue in the 5th Year:** Refer to above Table !!
7. **The performance of the rate of return:** The total return rate in 5 years far exceeds the industry average, with 5.54 times the excluding driver and 9.74 times included drive.

# AI + AR Smart Glasses 2025 - 2030 Migration Road Map

## Orange Corp. Next-Generation AI + AR Smart Glasses

### Single MicroOLED Microdisplay + PVH Planar Optics

Orange Corp. is developing next-generation AI + AR smart glasses that deliver a 200-inch HD full-color panoramic experience with local AI inference, naked-eye 3D video, and all-day wearable comfort.
Built on a single MicroOLED microdisplay and unique PVH planar optics, we achieve high optical efficiency, ultra-lightweight form factor, and a consumer-level price of $99-$129.




- **Lighter** — Approx. 35g target weight
- **Sharper** — 1920×1080 to 4K×2K resolution
- **Wider View** — >55° FOV and 180° diagonal
- **More Efficient** — 50%-100% optical efficiency
- **More Affordable** — Target price $99-$129

### CORE TECHNOLOGY: SINGLE MICROOLED + PVH PLANAR OPTICS



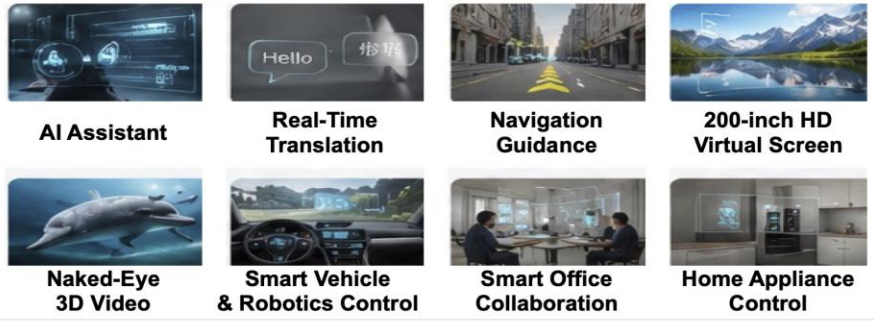
Single MicroOLED Microdisplay | Polarizer | PVH Coupling Layer | PVH Expansion Layer | PVH Output Layer | Polarizer | Eye Box 12×9mm

- Single MicroOLED Microdisplay
- Unique PVH Planar Optics
- Ultra-Slim Optical Module
- Designed for Mass Production
- Consumer-Level Price Target

### IMMERSIVE VISUAL EXPERIENCE

| | | |
|---|---|---|
| Resolution 1920×1080 to 4K×2K | FOV >55° and 180° diagonal | Optical Efficiency 50%-100% |
| Thickness 3-5mm | Eye Box 12×9mm | Weight Approx. 35g |

### APPLICATION SCENARIOS




- AI Assistant
- Real-Time Translation
- Navigation Guidance
- 200-inch HD Virtual Screen
- Naked-Eye 3D Video
- Smart Vehicle & Robotics Control
- Smart Office Collaboration
- Home Appliance Control

### PRODUCT SPECIFICATIONS (TARGET)

| | | | |
|---|---|---|---|
| Display Type | Single MicroOLED Microdisplay | Thickness | 3-5mm |
| Optics | Unique PVH Planar Optics | Eye Box | 12x9mm |
| Resolution | 1920x1080 to 4Kx2K | Weight | Approx. 35g |
| Field of View | >55° and 180° diagonal | Target Price | $99 to $129 |
| Optical Efficiency | 50% to 100% | Positioning | Consumer-Level AI + AR Glasses |

### INVESTMENT HIGHLIGHTS

1. **Differentiated PVH Optics Architecture** — Single MicroOLED + PVH planar optics reduce size, weight, and cost.
2. **Consumer-Level Price Ambition** — Target price of $99 to $129 enables mass-market adoption.
3. **Lightweight & Comfortable Design** — Approx. 35g target weight and 3-5mm optical module thickness for all-day wearable comfort.
4. **200-inch HD Immersive Experience** — Delivers 200-inch HD full-color panoramic display with high efficiency and wide FOV.
5. **Deep-Tech Innovation with Strong IP Foundation** — 30+ years of high-tech commercialization experience and 130+ global patents.

### ORANGE CORP. & HUAXIA SHARES LTD.: BUILDING THE FUTURE ECOSYSTEM

**Orange Corp.** — AI + AR Smart Glasses Platform



- AI Inference
- Spatial Computing
- Panoramic Display
- All-Scenario Interaction

Synergy for Future Connectivity Ecosystem ⇄

**Huaxia Shares Ltd.** — THz 6G Connectivity Platform



- THz 6G Transceiver
- Ultra-High Speed Data Link
- Low Latency Connection
- Massive Connectivity

*Two core platforms synergize to empower the next generation of ubiquitous intelligence.*

### VISION

- 200-inch HD Full-Color Panoramic Display
- Local AI Inference
- Naked-Eye 3D Video
- Wearable Computing Terminal
- EV, Robotics, Smart Office, Smart Home

### TECHNOLOGY LEADERSHIP

- PVH Optics Innovation
- Single MicroOLED Architecture
- High Efficiency 50%-100%
- Mass Production Ready
- Global IP Portfolio

### ROADMAP

| Private Placement | Product R&D & Validation | Engineering Verification | Mass Production Preparation | Revenue Generation |
|---|---|---|---|---|
| Seed / Series A Target: $3M-$10M | 2024-2025 | 2025-2026 | 2026-2027 | 2027+ |

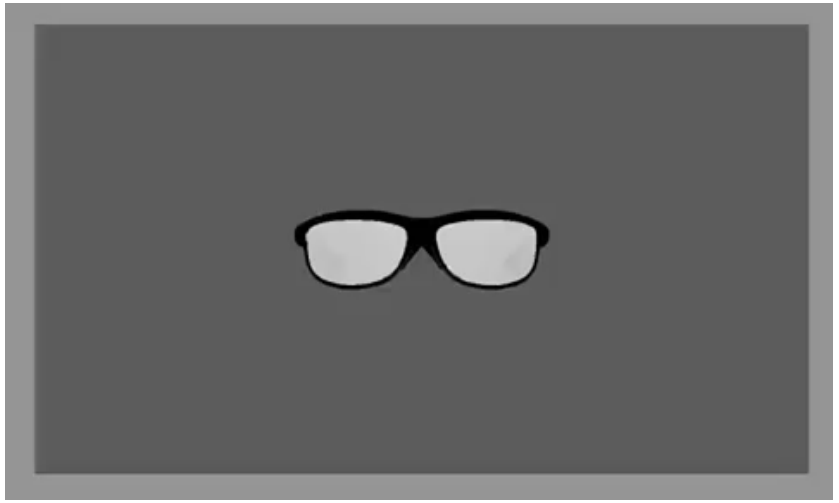
### CAPITAL MARKET PLAN

**Orange Corp.** Capital Path
Nasdaq
U.S. IPO Planning

**Huaxia Shares Ltd.** Capital Path
Nasdaq
HKEX
U.S. or HKEX IPO Planning

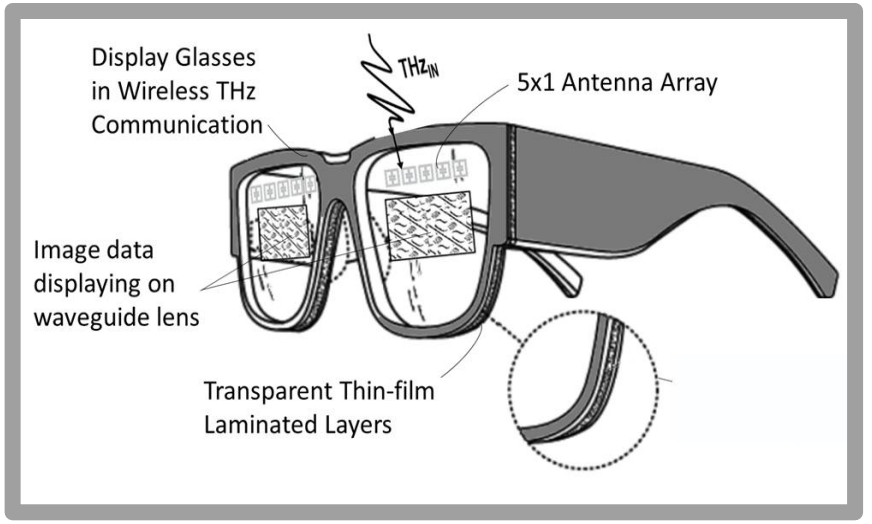
Note: All specifications are target values. Final performance may vary. Updated: June 2026.

## Present



# Thank You !

## Future




# Groundbreaking PVH Display Technology that Redefines Industry's Future

MAS capital

**In Partnership with MAS Capital**