

#### HAMAMATSU Virtual Patent Marking - August 9, 2024

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Items listed below may be sold individually or as part of a combination product.

### **qCMOS™ Camera**

Patented Products	Associated Patent Number(s)
ORCA-Quest	US9,423,601 US10,142,566 US10,362,245 US10,602,087
(C15550-20UP series)	US11,204,432 US11,215,717 US11,656,374 US11,835,667
	US11,921,245
ORCA-Quest 2	US9,423,601 US10,142,566 US10,362,245 US10,602,087
(C15550-22UP series)	US11,204,432 US11,215,717 US11,656,374 US11,835,667
	US11,921,245



## **CMOS Camera**

Patented Products	Associated Patent Number(s)
ORCA-Fire	US9,423,601 US10,142,566 US10,362,245 US10,602,087
(C16240-20UP series)	
ORCA-Fusion BT	US9,423,601 US10,142,566 US10,362,245 US10,602,087
(C15440-20UP series)	
ORCA-Fusion	US9,423,601 US10,142,566 US10,362,245 US10,602,087
(C14440-20UP series)	
ORCA-Flash4.0 V3	US9,423,601 US10,142,566 US10,362,245 US10,602,087
(C13440-20CU series)	US9,995,920 US10,684,459
ORCA-Lightning	US9,423,601 US10,142,566 US10,362,245 US10,602,087
(C14120-20P series)	



## X-ray TDI camera

Patented Products	Associated Patent Number(s)
C15400 Series	US8,723,129 US8,829,449 US9,279,890 US10,101,469
	US10,746,884 US10,859,715

### X-ray line scan camera

Patented Products	Associated Patent Number(s)
C8133 Series	US8,223,922 US8,280,005 US8,600,005 US8,964,939
	US9,594,031 US10,393,676
C14300 Series	US10,267,751
C11800 Series	US10,267,751
C14960 Series	US10,267,751
C15600 Series	US10,267,751



# **Digital slide scanner**

Patented Products	Associated Patent Number(s)
NanoZoomer S360	US7,602,996 US7,801,352 US7,978,898 US8,106,942
	US8,107,770 US8,126,250 US8,422,127 US9,911,028
	USD848,434 USD848,433 US10,422,987 USD866,555
	USD886,830 USD892,811 USD893,505 USD897,351
	US10,969,570 US11,022,621 US11,249,297 US11,280,991
	US11,698,519
NanoZoomer S360MD	US7,602,996 US7,801,352 US7,978,898 US8,106,942
	US8,107,770 US8,126,250 US8,422,127 US9,911,028
	US10,422,987 USD866,555 USD886,830 USD892,811
	USD893,505 USD897,351 US10,969,570 US11,249,297
	US11,280,991 US11,698,519
NanoZoomer S210	US7,602,996 US7,801,352 US7,978,898 US8,106,942
	US8,107,770 US8,126,250 US9,911,028 US10,422,987
	US11,280,991 US11,698,519
NanoZoomer S60	US7,602,996 US7,801,352 US7,885,447 US7,978,898
	US8,106,942 US8,107,770 US8,126,250 US9,911,028
	US10,422,987 US11,280,991 US11,698,519
NanoZoomer S20	US7,602,996 US7,801,352 US7,978,898 US8,106,942
	US8,107,770 US8,126,250 US8,422,127 US9,911,028
	US10,422,987 US11,249,297 US11,280,991 US11,698,519
NanoZoomer-SQ	US7,602,996 US7,801,352 US7,978,898 US8,106,942



US8,107,770 US8,126,250 US8,422,127 US9,911,028
US10,088,659 US10,422,987 US11,280,991 US11,698,519

#### **Drug screening system**

Patented Products	Associated Patent Number(s)
FDSS/µCell	US10,180,525 US10,495,804
EFS pacing system	US9,778,189

## **Light-Sheet Microplate Cytometer**

Patented Products	Associated Patent Number(s)
CYTOQUBE	US10,809,509 US11,169,092 US11,131,839
	US11,391,934 US11,709,350 US11,852,792
	USD1,015,566 USD1,010,154 USD1,015,567
	US11,822,066



### **Luminescence efficiency measurement system**

Patented Products	Associated Patent Number(s)
Absolute PL quantum	US8,324,561 US8,462,337 US8,525,989 US8,587,779
yield spectrometer	US8,643,839 US9,423,339 US10,094,779 US10,209,189
	US11,150,178
Quantaurus-QY	US8,462,337 US8,587,779 US8,592,780 US8,643,839
	US8,916,836 US9,024,278 US9,423,339 US10,094,779
	US11,150,178
Quantaurus-QY Plus	US8,462,337 US8,525,989 US8,587,779 US8,592,780
UV-NIR	US8,643,839 US8,916,836 US9,024,278 US9,423,339
	US9,952,101 US10,036,706 US10,094,779
	US10,222,332 US10,928,246
ODPL measurement	US10,816,402
system	

## Fluorescence lifetime/transient absorption analysis system

Patented Products	Associated Patent Number(s)
Quantaurus-Tau	US10,962,932
Fluorescence lifetime	
spectrometer	



# Molecular orientation characteristic measurement system

Patented Products	Associated Patent Number(s)
Molecular orientation	US 11,243,073 US11,920,921
characteristic	
measurement system	

## Micro LED inspection system

Patented Products	Associated Patent Number(s)
MiNY PL Micro LED PL	US11,694,324
inspection system	

#### **Spectrometer**

Patented Products	Associated Patent Number(s)
OPAL - Luxe High	US11,892,352 US11,828,653
dynamic range	
spectrometer	



# Failure analysis system

Patented Products	Associated Patent Number(s)
PHEMOS Series	US11,402,200 US11,714,120
iPHEMOS Series	US11,402,200 US11,714,120
EO Probing unit	US9,099,350 US9,562,944 US9,588,175 US9,618,563
	US10,060,975 US10,101,383 US10,139,447 US10,191,104
	US10,330,615 US10,508,996 US10,591,427 US10,705,139
	US11,047,792
High power Incoherent	US9,099,350 US10,408,874
Light source for	
EOP/EOFM	
Laser marker unit	US10,312,166 US10,586,743 US10,607,900 US10,923,404
Laser scan system	US9,733,297
C10656 Series	
Laser scan system	US9,733,297 US9,557,377 US11,209,476
C14432 Series	
MOCI unit	US10,139,370 US10,564,126 US10,656,187 US10,698,006
	US10,976,284 US11,009,531 US11,243,113 US11,733,091
Semishop failure	US7,752,594 US9,536,300 US9,734,571 US10,371,746
analysis software	US11,009,531
SIL cap	US7,414,800 US7,423,816 US8,094,389 US8,582,202
	US10,545,309 US10,558,010 US11,256,079 US11,913,888
	US11,841,393
Thermal lock-in unit	US9,575,020 US9,658,116 US10,365,324 US10,371,746



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Mirror Baffle	US9,411,143 US10,663,709, US10,048,483
OBIRCH Analysis	US11,573,251 US11,927,626