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HAMAMATSU Virtual Patent Marking – MARCH 3, 2023

HAMAMATSU PHOTONICS's and its subsidiaries' products ("**HAMAMATSU** Products") are protected by patents in the U.S. and other countries. This list is provided to satisfy the virtual patent marking provisions of the America Invents Act and to further serve as notice under 35 U.S.C. §287(a).

The **HAMAMATSU** Products listed below are protected by one or more patents listed in the corresponding column in the United States.

This list may not be all inclusive. The **HAMAMATSU** Products listed may be protected by additional patents, and other patents may be pending. Any **HAMAMATSU** Products not listed may be protected by one or more patents owned by Hamamatsu Photonics and/or its subsidiaries.

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

<u>qCMOS™ Camera</u>

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

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)	



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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)	



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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 US8,478,073
	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
NanoZoomer S360MD	US7,602,996 US7,801,352 US7,978,898 US8,106,942
	US8,107,770 US8,126,250 US8,422,127 US8,478,073
	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
NanoZoomer S210	US7,602,996 US7,801,352 US7,978,898 US8,106,942
	US8,107,770 US8,126,250 US8,478,073 US9,911,028
	US10,422,987 US11,280,991
NanoZoomer S60	US7,602,996 US7,801,352 US7,885,447 US7,978,898
	US8,106,942 US8,107,770 US8,126,250 US8,478,073
	US9,911,028 US10,422,987 US11,280,991
NanoZoomer S20	US7,602,996 US7,801,352 US7,978,898 US8,106,942
	US8,107,770 US8,126,250 US8,422,127 US8,478,073
	US9,911,028 US10,422,987 US11,249,297 US11,280,991
NanoZoomer-SQ	US7,602,996 US7,801,352 US7,978,898 US8,106,942



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US8,107,770 US8,126,250 US8,422,127 US8,478,073
US9,911,028 US10,088,659 US10,422,987 US11,280,991

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

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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
characteristic	
measurement system	



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Failure analysis system

Patented Products	Associated Patent Number(s)
PHEMOS Series	US10,048,483 US10,663,709 US11,402,200
iPHEMOS Series	US10,048,483 US10,663,709 US11,402,200
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	US9,557,377 US10,312,166 US10,586,743 US10,607,900
	US10,923,404
Laser scan system	US9,411,143 US9,733,297
C10656 Series	
Laser scan system	US9,411,143 US9,733,297 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
Semishop failure	US7,752,594 US9,536,300 US9,734,571 US10,371,746
analysis software	US11,009,531
SIL cap	US7,046,449 US7,110,172 US7,149,036 US7,221,502
	US7,312,921 US7,414,800 US7,423,816 US7,576,910
	US8,094,389 US8,582,202 US10,545,309 US10,558,010



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Thermal lock-in unit	US9,575,020 US9,658,116 US10,365,324 US10,371,746
DA function kit	US7,230,436