

(19) United States

(12) Patent Application Publication (10) Pub. No.: US 2022/0360200 A1

Nov. 10, 2022 (43) **Pub. Date:**

(54) CAMERA MODULE

(71) Applicant: ASAHI KASEI MICRODEVICES CORPORATION, Tokyo (JP)

Inventors: Takahiro I, Tokyo (JP); Arata KASAMATSU, Tokyo (JP)

Assignee: ASAHI KASEI MICRODEVICES CORPORATION, Tokyo (JP)

Appl. No.: 17/868,679 (21)

(22) Filed: Jul. 19, 2022

Related U.S. Application Data

(63) Continuation of application No. 16/681,898, filed on Nov. 13, 2019, now Pat. No. 11,431,269.

(30)Foreign Application Priority Data

Nov. 14, 2018	(JP)	 2018-214181
Sep. 19, 2019	(JP)	 2019-170466

Publication Classification

(51)	Int. Cl.	
` ′	H02P 6/00	(2006.01)
	H04N 5/225	(2006.01)
	H02K 11/215	(2006.01)
	H02K 41/035	(2006.01)
	H02P 6/16	(2006.01)

(52) U.S. Cl. CPC H02P 6/006 (2013.01); H04N 5/2253 (2013.01); H04N 5/2254 (2013.01); H02K 11/215 (2016.01); H02K 41/0356 (2013.01); **H02P** 6/16 (2013.01); H02K 2201/18 (2013.01); G02B 7/02 (2013.01)

(57)ABSTRACT

A camera module includes a lens, a first magnet and a second magnet mounted on a mobile body including the lens, a coil portion arranged near the first magnet and configured to move the first magnet in a first direction, and the magnetic sensor arranged near the second magnet and configured to detect the position of the second magnet in the first direction as a detection direction.

