UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

Form 6-K

Report of Foreign Private Issuer Pursuant to Rule 13a-16 or 15d-16 under the Securities Exchange Act of 1934

For the month of February 2023

Commission file number: 001-41334

RAIL VISION LTD. (Translation of registrant's name into English)

15 Ha'Tidhar St

Ra'anana, 4366517 Israel (Address of principal executive offices)

Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F.

Form 20-F ⊠ Form 40-F □

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On February 1, 2023, Rail Vision Ltd.'s (the "Company") shareholder, Knorr-Bremse Systeme für Schienenfahrzeuge GmbH ("Knorr-Bremse"), pursuant to the Company's amended and restated articles of association, appointed Keren Aslan to the Company's board of directors, effective as of February 1, 2023.

Ms. Aslan currently serves as the chief financial officer of Israel Post Ltd. Ms. Aslan served from April 2019 to September 2022 as chief executive officer of Superbus, a company in the Israeli public transportation market. Prior to that, from 2012 to 2018, Ms. Aslan served as the chief financial officer of Israel Railways Ltd., leading its innovation department and its first public bonds raise on the Tel Aviv Stock Exchange.

Ms. Aslan holds a B.A. degree in Economics and Business Management from Tel Aviv University and a M.A degree in Economics from Tel Aviv University. Ms. Aslan also serves as a director of Hanan Mor Group Holdings Ltd. and Rav Bariach (08) Industries Ltd., both listed on the Tel Aviv Stock Exchange, and Trans Israel Ltd., an Israeli government-owned corporation functioning as a project management agency of the Israeli Ministry of Transport and Road Safety.

This Report of Foreign Private Issuer on Form 6-K is hereby incorporated by reference into the Registrant's Registration Statement on Form S-8 (File No. 333-265968), to be a part thereof from the date on which this report is submitted, to the extent not superseded by documents or reports subsequently filed or furnished.

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SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Rail Vision Ltd.

Date: February 7, 2023

By: /s/ Ofer Naveh

Name: Ofer Naveh