



DIVISION OF  
CORPORATION FINANCE

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

June 1, 2023

Shantanu Gaur  
Chief Executive Officer  
Allurion Technologies Holdings, Inc.  
11 Huron Drive  
Natick, MA 01760

**Re: Allurion Technologies Holdings, Inc.  
Registration Statement on Form S-4  
Filed May 12, 2023  
File No. 333-271862**

Dear Shantanu Gaur:

We have reviewed your amended registration statement and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter by amending your registration statement and providing the requested information. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your registration statement and the information you provide in response to these comments, we may have additional comments. Unless we note otherwise, our references to prior comments are to comments in our March 13, 2023 letter.

Registration Statement on Form S-4

The Allurion VCS and other products or services contain third-party open source software components., page 122

1. We note the new disclosure that the Allurion VCS and your other products and services contain software licensed to you by third-party authors under “open source” licenses and that use of such software may entail greater risks than use of non-open source third-party commercial software. At an another appropriate section of your registration statement, revise to disclose any procedures in place to mitigate such risks. If you do not have current procedures in place, revise the risk factor to disclose such.

Sales of shares of New Allurion Common Stock following the completion of the Mergers may cause the market price, page 135

2. We note your response to prior comment 7 and the disclosure that the effective prices at which the Sponsor, certain independent directors of Compute Health, certain Historical Rollover Equityholders, the PIPE Investors, RTW, a Fortress affiliate and HVL will have acquired their shares of New Allurion Common Stock are generally substantially less than the IPO price of \$10.00 per share and may be less than the per share value implied in the PIPE Investment of \$7.04 per share. To provide shareholders additional context, revise to disclose the effective prices that the referenced categories of investors paid for such shares.

Risk Factors

The provisions of the Proposed Bylaws requiring exclusive forum in the Court of Chancery.... page 136

3. Please revise this section, and your Exclusive Forum section on page 350, to disclose the risks that the exclusive forum provision may result in increased costs for investors to bring a claim.

The Compute Health Board's Reasons for Approval of the Business Combination, page 191

4. We note your response to prior comment number 19 and reissue in part. Please revise your disclosure to discuss how Compute Health's Board considered certain conflicts of interest in negotiating and recommending the business combination.

Non-Redemption Agreement, page 216

5. We note that the Non-Redemption Agreement is "subject to Medtronic and Allurion, or their respective designees, entering into a sales agency agreement the Medtronic Collaboration pursuant to the Sales Agency Agreement that is satisfactory to Medtronic" and that "such sales agency agreement shall be substantially consistent with the memorandum of understanding between Target and Investor." Please revise to include the material terms of such memorandum of understanding.

Consequences of the CPUH Merger , page 261

6. We note your revised disclosures in response to prior comment 4. The tax opinion exhibit refers to assumptions, exceptions, limitations and qualifications set forth in the registration statement and that the registration statement also refers to the assumptions, exceptions, limitations and qualifications set forth in the tax opinion exhibit. Please revise to describe the qualifications in the registration statement upon which the tax opinion relies. For additional guidance concerning assumptions and opinions subject to uncertainty, refer to Staff Legal Bulletin No. 19.

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Intellectual Property, page 317

7. We note your response to prior comment number 25 and reissue, in part. Please revise to provide the certain type of patent protection provided by the specified jurisdiction. For example, please clarify whether they are design, plant, provisional, or utility patents.

You may contact Julie Sherman at 202-551-3640 or Brian Cascio at 202-551-3676 if you have questions regarding comments on the financial statements and related matters. Please contact Benjamin Richie at 202-551-7857 or Lauren Nguyen at 202-551-3642 with any other questions.

Sincerely,

Division of Corporation Finance  
Office of Industrial Applications and  
Services

cc: Danielle Lauzon