Amendment No. 1 to Prospectus Supplement dated August 8, 2023 (to Prospectus dated June 14, 2021)

Up to \$4,375,000 Common Stock



Red Cat Holdings, Inc.

This Amendment No. 1 to Prospectus Supplement amends the prospectus supplement dated August 8, 2023. This Amendment to Prospectus Supplement should be read in conjunction with the prospectus supplement dated August 8, 2023 (the "Prospectus Supplement") and the prospectus dated June 14, 2021, each of which are to be delivered with this amendment to prospectus supplement. This amendment to prospectus supplement amends only those sections of the Prospectus Supplement listed in this amendment; all other sections of the Prospectus Supplement remain as is. We have entered into an ATM Sales Agreement with ThinkEquity LLC ("ThinkEquity" or the "Sales Agent") relating to shares of our common stock offered by this Amendment to Prospectus Supplement, the Prospectus Supplement and the accompanying prospectus. In accordance with the terms of the ATM Sales Agreement, we may offer and sell shares of our common stock, par value \$0.001 per share, having an aggregate offering price of up to \$4,375,000 from time to time through ThinkEquity.

Our common stock is listed on The Nasdaq Capital Market under the symbol "RCAT." On December 1, 2023, the last reported sale price of our common stock on The Nasdaq Capital Market was \$0.8877 per share.

Sales of our common stock, if any, under this Amendment to Prospectus Supplement, the Prospectus Supplement, and the accompanying prospectus may be made at market prices by any method permitted by law that is deemed an "at the market offering" as defined in Rule 415(a)(4) promulgated under the Securities Act of 1933, as amended, or the Securities Act. ThinkEquity is not required to sell any specific number or dollar amount of our common stock but will act as sales agent using commercially reasonable efforts, consistent with its normal trading and sales practices and applicable state and federal laws, rules and regulations and the rules of Nasdaq. There is no arrangement for funds to be received in any escrow, trust or similar arrangement.

ThinkEquity will be entitled to compensation at a commission rate equal to 2.5% of the gross sales price per share sold under the Sales Agreement. See "Plan of Distribution" beginning on S-7 of the Prospectus Supplement for additional information regarding ThinkEquity's compensation. In connection with the sale of our common stock on our behalf, ThinkEquity may be deemed to be an "underwriter" within the meaning of the Securities Act and the compensation ofThinkEquity will be deemed to be underwriting commissions or discounts. We have also agreed to provide indemnification and contribution to ThinkEquity with respect to certain liabilities, including liabilities under the Securities Act and the Exchange Act.

We are a smaller reporting company under Rule 405 of the Securities Act and, as such, have elected to comply with certain reduced public company reporting requirements for this prospectus, the documents incorporated by reference herein and future filings.

Investing in our common stock involves a high degree of risk. See "Risk Factors" beginning on page S-4 of the Prospectus Supplement and the documents incorporated by reference into the Prospectus Supplement for a discussion of information that you should consider in connection with an investment in our common stock.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this Amendment to Prospectus Supplement or the Prospectus Supplement is truthful or complete. Any representation to the contrary is a criminal offense.

ThinkEquity

TABLE OF CONTENTS

Amendment No. 1 to Prospectus Supplement

	Page
Summary of the Offering	S-1
Use of Proceeds	S-2
Dilution	S-2

Common stock offered by us:

Summary of the Offering Shares of our common stock having an aggregate offering price of up to \$4,375,000.

Shares of common stock outstanding prior to the offering: 55,762,655 shares

Shares of common stock outstanding after the offering:	Up to 64,662,058, assuming sales of 8,899,403 shares of common stock in this offering at a price of \$0.8877 per share, which was the closing price of our common stock on the Nasdaq on December 1, 2023. The actual number of shares issued will vary depending on the sales prices under this offering.
Manner of Offering:	"At the market offering" that may be made from time to time through ThinkEquity. See "Plan of Distribution" beginning on page S-7 of this prospectus supplement.
Use of proceeds:	We intend to use the net proceeds from this offering for general corporate purposes, working capital, operating expenses, and capital expenditures. See the "Use of Proceeds" section in this prospectus supplement for a more complete description of the intended use of proceeds from this offering.
Nasdaq symbol:	Our common stock is listed on the Nasdaq Capital Market under the symbol "RCAT"
Risk factors:	Investing in our securities involves a high degree of risk and purchasers of our securities may lose their entire investment. See "Risk Factors" and the other information included and incorporated by reference into this prospectus supplement for a discussion of risk factors you should carefully consider before deciding to invest in our securities.
Nasdaq symbol:	 capital, operating expenses, and capital expenditures. See the "Use of Proceeds" section in t prospectus supplement for a more complete description of the intended use of proceeds from t offering. Our common stock is listed on the Nasdaq Capital Market under the symbol "RCAT" Investing in our securities involves a high degree of risk and purchasers of our securities n lose their entire investment. See "Risk Factors" and the other information included a incorporated by reference into this prospectus supplement for a discussion of risk factors y

(1) The number of shares of our common stock that will be outstanding immediately after this offering is based on 55,762,655 shares of common stock outstanding as of December 4, 2023 and excludes the following:

• 6,861,517 shares of common stock issuable upon exercise of outstanding options under our equity incentive plans at a weighted-average exercise price of \$1.54 per share

1,539,999 shares of common stock issuable upon exercise of outstanding warrants with a weighted-average exercise price of \$3.83.

• 3,896 shares of common stock issuable upon conversion of outstanding shares of our Series B Preferred Stock;

•662,136 shares of common stock awarded under employment agreements which have not yet been issued.

S-1

USE OF PROCEEDS

We estimate that the net proceeds from this offering will be approximately \$4,158,125 after deducting estimatedunderwriting discounts and estimated offering expenses payable by us. We intend to use the net proceeds of this offering for general corporate purposes and working capital and capital expenditures.

As of the date of this prospectus supplement, we cannot specify with certainty all of the particular uses for the net proceeds to be received upon the completion of this offering. The amounts and timing of our actual expenditures will depend on numerous factors, including the status of our product development efforts, sales and marketing activities, technological advances, the amount of cash generated or used by our operations and competition. Accordingly, our management will have broad discretion in the application of the net proceeds and investors will be relying on the judgment of our management regarding the application of the proceeds of this offering.

Pending our use of the net proceeds from this offering, we intend to invest the net proceeds in a variety of capital preservation investments, including short-term, investment-grade, interest-bearing instruments and U.S. government securities.

DILUTION

If you invest in our common stock in this offering, your interest will be diluted to the extent of the difference between the public offering price per share of common stock and the as adjusted net tangible book value per share of common stock immediately after this offering.

Our net tangible book value is the amount of our total tangible assets less our total tangible liabilities. Our net tangible book value as of July 31, 2023 was \$25,915,428, or (\$0.47) per share of common stock. Net tangible book value per share represents the amount of total tangible assets, minus the amount of total tangible liabilities, divided by the total number of shares of common stock outstanding. Pro forma net tangible book value per share is calculated after giving effect to the conversion of all of our outstanding preferred shares. Dilution is determined by subtracting pro forma net tangible book value per share from the public offering price per share.

Without taking into account any other changes in such net tangible book value after April 30, 2023, other than to give effect to our issuance and sale of 4,928,467 shares of common stock in this offering at an assumed public offering price of US\$0.8877 per share, the last price for our common stock on December 1, 2023, and after deduction of underwriting discounts and commissions and estimated offering expenses payable by us, our pro forma as adjusted net tangible book value as of July 31, 2023 would have been US\$0.50 per outstanding share of common stock. This represents an immediate increase in net tangible book value of US\$0.39 per share to purchasers of common stock in this offering.

S-2

Up to \$4,375,000 Common Stock



Red Cat Holdings, Inc.

ThinkEquity

December 6, 2023