

**UNITED STATES
SECURITIES AND EXCHANGE
COMMISSION**

Washington, D.C. 20549

SCHEDULE 13D

Under the Securities Exchange Act of 1934
(Amendment No.)*

U.S. Auto Parts Network, Inc.

(Name of Issuer)

Common Stock, \$0.001 par value per share

(Title of Class of Securities)

90343C100

(CUSIP Number)

**Michael R. Murphy
Discovery Group I, LLC
191 North Wacker Drive
Suite 1685
Chicago, Illinois 60606
Telephone Number: (312) 265-9600**

(Name, Address and Telephone Number of Person
Authorized to Receive Notices and Communications)

May 2, 2012

(Date of Event which Requires Filing of this Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of §§240.13d-1(e), 240.13d-1(f) or 240.13d-1(g), check the following box.

☐

Note: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See §240.13d-7 for other parties to whom copies are to be sent.

*The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter disclosures provided in a prior cover page.

The information required on the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

1.	Names of Reporting Persons. Discovery Group I, LLC
2.	Check the Appropriate Box if a Member of a Group (See Instructions) (a) <input type="checkbox"/> (b) <input type="checkbox"/>
3.	SEC Use Only
4.	Source of Funds (See Instructions) AF
5.	Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e) <input type="checkbox"/>
6.	Citizenship or Place of Organization Delaware
Number of Shares Beneficially Owned by Each Reporting Person With	7. Sole Voting Power None.
	8. Shared Voting Power 1,634,352
	9. Sole Dispositive Power None.
	10. Shared Dispositive Power 1,634,352
11.	Aggregate Amount Beneficially Owned by Each Reporting Person 1,634,352
12.	Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions) <input type="checkbox"/>
13.	Percent of Class Represented by Amount in Row (11) 5.3%
14.	Type of Reporting Person (See Instructions) IA

1.	Names of Reporting Persons. Daniel J. Donoghue
2.	Check the Appropriate Box if a Member of a Group (See Instructions) (a) <input type="checkbox"/> (b) <input type="checkbox"/>
3.	SEC Use Only
4.	Source of Funds (See Instructions) AF
5.	Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e) <input type="checkbox"/>
6.	Citizenship or Place of Organization United States of America
Number of Shares Beneficially Owned by Each Reporting Person With	7. Sole Voting Power None.
	8. Shared Voting Power 1,634,352
	9. Sole Dispositive Power None.
	10. Shared Dispositive Power 1,634,352
11.	Aggregate Amount Beneficially Owned by Each Reporting Person 1,634,352
12.	Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions) <input type="checkbox"/>
13.	Percent of Class Represented by Amount in Row (11) 5.3%
14.	Type of Reporting Person (See Instructions) IN

1.	Names of Reporting Persons. Michael R. Murphy
2.	Check the Appropriate Box if a Member of a Group (See Instructions) (a) <input type="checkbox"/> (b) <input type="checkbox"/>
3.	SEC Use Only
4.	Source of Funds (See Instructions) AF
5.	Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e) <input type="checkbox"/>
6.	Citizenship or Place of Organization United States of America
Number of Shares Beneficially Owned by Each Reporting Person With	7. Sole Voting Power None.
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12.	Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions) <input type="checkbox"/>
13.	Percent of Class Represented by Amount in Row (11) 5.3%
14.	Type of Reporting Person (See Instructions) IN

Item 1. Security and Issuer

This statement relates to the Common Stock, \$0.001 par value per share (the “**Common Stock**”), of U.S. Auto Parts Network, Inc., a Delaware corporation (the “**Company**”), which has its principal executive offices at 16941 Keegan Avenue, Carson, CA 90746.

Item 2. Identity and Background

This statement is being jointly filed by the following persons (the “**Reporting Persons**”):

Discovery Group I, LLC (“**Discovery Group**”) is a Delaware limited liability company and a registered investment adviser under the Investment Advisers Act of 1940, as amended, that is primarily engaged in the business of investing in securities on behalf of institutional clients.

Daniel J. Donoghue is a Managing Member of Discovery Group and of various related entities, which is his principal occupation.

Michael R. Murphy is a Managing Member of Discovery Group and of various related entities, which is his principal occupation.

Both Mr. Donoghue and Mr. Murphy are United States citizens.

The business address of each of the Reporting Persons is 191 North Wacker Drive, Suite 1685, Chicago, Illinois 60606.

During the past five years, none of the Reporting Persons have been (i) convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors) or (ii) a party to a civil proceeding of a judicial or administrative body of competent jurisdiction and as a result of such proceeding was or is subject to a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, federal or state securities laws, or finding any violation with respect to such laws.

Item 3. Source and Amount of Funds or Other Consideration

The total purchase price for the 1,634,352 shares of Common Stock beneficially owned by Discovery Group and Messrs. Donoghue and Murphy as of May 10, 2012 was approximately \$6,506,730. The source of such funds was the assets of two private investment partnerships (collectively, the “**Partnerships**”) over which Discovery Group exercises discretionary investment management authority, including proceeds of margin loans under margin loan facilities maintained in the ordinary course of business by the Partnerships with a broker on customary terms and conditions. The Partnerships are the legal owner of all of the Common Stock beneficially owned by Discovery Group and Messrs. Donoghue and Murphy.

Item 4. Purpose of Transaction

The Reporting Persons acquired beneficial ownership of the shares of Common Stock reported herein as part of their investment activities on behalf of the Partnerships. The Reporting Persons acquired the shares of Common Stock reported herein because they believe that the trading prices of the Common Stock do not adequately reflect the potential value of the Company’s underlying business and assets.

The Reporting Persons intend to review and evaluate their investment in the Common Stock on an ongoing basis and may, depending upon their evaluation of the business and prospects of the Company, or such other considerations as they may deem relevant, determine to increase, decrease, or dispose of their holdings of Common Stock. As a part of such review and evaluation, the Reporting Persons may hold additional discussions with the Company’s management and directors, other shareholders and other interested parties.

Except as otherwise described in this Item 4, the Reporting Persons do not have present plans or proposals that relate to or would result in any of the following (although the Reporting Persons reserve the right to develop such plans or proposals or any other plans relating to the Company and to take action with respect thereto): (i) the acquisition by any person of additional securities of the Company, or the disposition of securities of the Company; (ii) an extraordinary corporate transaction, such as a merger, reorganization, or liquidation, involving the Company or any of its subsidiaries; (iii) a sale or transfer of a material amount of assets of the Company or any of its subsidiaries; (iv) any change in the present board of directors or management of the Company, including any plans or proposals to change the number or term of directors or to fill any existing vacancies on the board; (v) any material change in the present capitalization or dividend policy of the Company; (vi) any other material change in the Company’s business or corporate structure; (vii) changes in the Company’s certificate of incorporation, bylaws, or instruments corresponding thereto or other actions that may impede the acquisition of control of the Company by any person; (viii) causing a class of securities of the Company to be delisted from a national securities exchange or to cease to be authorized to be quoted in an inter-dealer quotation system of a registered national securities association; (ix) a class of equity securities of the Company becoming eligible for termination of registration pursuant to Section 12(g)(4) of the Securities Exchange Act of 1934, as amended; or (x) any action similar to any of those enumerated above.

Item 5. Interest in Securities of the Issuer

The information concerning percentages of ownership set forth below is based on 30,653,356 shares of Common Stock reported outstanding as of May 1, 2012 in the Company’s Quarterly Report on Form 10-Q for the quarter ended March 31,

2012.

Discovery Group beneficially owns 1,634,352 shares of Common Stock as of May 10, 2012, which represents 5.3% of the outstanding Common Stock.

Mr. Donoghue beneficially owns 1,634,352 shares of Common Stock as of May 10, 2012, which represents 5.3% of the outstanding Common Stock.

Mr. Murphy beneficially owns 1,634,352 shares of Common Stock as of May 10, 2012, which represents 5.3% of the outstanding Common Stock.

Discovery Group is the sole general partner of one of the Partnerships and has sole discretionary investment authority with respect to the other Partnership's investment in the Common Stock. Messrs. Donoghue and Murphy are the sole managing members of Discovery Group. As a consequence, Discovery Group and Messrs. Donoghue and Murphy may be deemed to share beneficial ownership of all of the shares of Common Stock owned by both of the Partnerships.

The transactions in Common Stock effected by the Reporting Persons during the past 60 days are set out in Exhibit 1 hereto.

No person other than the Partnerships is known to any Reporting Person to have the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of, any of the shares of Common Stock reported herein.

Item 6. Contracts, Arrangements, Understandings or Relationships with Respect to Securities of the Issuer

There are no contracts, arrangements, understandings or relationships (legal or otherwise) between or among any of the Reporting Persons and any other person with respect to any securities of the Company other than the governing documents of Discovery Group and the Partnerships, the margin loan facilities referred to under Item 3 above, the Joint Filing Agreement of the Reporting Persons with respect to this Schedule 13D included as Exhibit 2 to this Schedule 13D, and the Powers of Attorney granted by Messrs Donoghue and Murphy with respect to reports under Section 13 of the Securities Exchange Act of 1934, as amended, which Powers of Attorney are included as Exhibit 3 and Exhibit 4, respectively, to this Schedule 13D.

Item 7. Material to Be Filed as Exhibits

Exhibit 1: List of transactions effected by the Reporting Persons in the Company's Common Stock during the 60-day period preceding this filing.

Exhibit 2: Joint Filing Agreement dated as of May 11, 2012, by and among Discovery Group; Daniel J. Donoghue; and Michael R. Murphy.

Exhibit 3: Power of Attorney of Daniel J. Donoghue, dated as of April 28, 2008.

Exhibit 4: Power of Attorney of Michael R. Murphy, dated as of April 28, 2008.

Signature

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

May 11, 2012

Date

DISCOVERY GROUP I, LLC,

By: Michael R. Murphy*

Signature

Michael R. Murphy, Managing Member

Name/Title

Daniel J. Donoghue*

Signature

Daniel J. Donoghue

Name/Title

Michael R. Murphy*

Signature

Michael R. Murphy

Name/Title

*By: /s/ Mark Buckley

Mark Buckley

Attorney-in-Fact for Daniel J. Donoghue

Attorney-in-Fact for Michael R. Murphy

Exhibit Index

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Exhibit 2 Joint Filing Agreement dated as of May 11, 2012, by and among Discovery Group; Daniel J. Donoghue; and Michael R. Murphy.

Exhibit 3 Power of Attorney of Daniel J. Donoghue, dated as of April 28, 2008.

Exhibit 4 Power of Attorney of Michael R. Murphy, dated as of April 28, 2008.

TRANSACTIONS DURING PAST 60 DAYS

The Reporting Persons engaged in the following transactions in shares of Common Stock of the Company during the past 60 days. Such transactions involved the sale of shares on the NASDAQ Global Select Market. Certain of the prices reported below reflect the weighted average sale price of the shares of Common Stock sold on the relevant date. The Reporting Persons hereby undertake to provide upon request to the SEC staff full information regarding the number of shares and prices at which each transaction was effected.

Date	Type	Price	Shares
3/12/2012	Purchase	\$ 3.6000	1170
3/13/2012 ¹	Purchase	\$ 3.6076	2207
3/14/2012 ²	Purchase	\$ 3.6314	4900
3/15/2012 ³	Purchase	\$ 3.6440	5000
3/16/2012 ⁴	Purchase	\$ 3.5997	22279
3/19/2012 ⁵	Purchase	\$ 3.5990	11000
3/20/2012 ⁶	Purchase	\$ 3.5500	250419
3/22/2012 ⁷	Purchase	\$ 3.5234	3723
3/23/2012 ⁸	Purchase	\$ 3.5199	207012
3/26/2012 ⁹	Purchase	\$ 3.7219	18013
3/27/2012 ¹⁰	Purchase	\$ 3.6995	6300
3/28/2012 ¹¹	Purchase	\$ 3.6654	2385
3/29/2012	Purchase	\$ 3.6400	3527
3/30/2012 ¹²	Purchase	\$ 3.6339	6386
4/2/2012 ¹³	Purchase	\$ 3.5480	4896
4/3/2012 ¹⁴	Purchase	\$ 3.4816	11505
4/4/2012 ¹⁵	Purchase	\$ 3.2318	17000
4/5/2012 ¹⁶	Purchase	\$ 3.1511	4563
4/9/2012 ¹⁷	Purchase	\$ 2.9546	4220
4/10/2012 ¹⁸	Purchase	\$ 2.9255	4400
4/11/2012 ¹⁹	Purchase	\$ 3.0211	8500
4/12/2012 ²⁰	Purchase	\$ 3.0858	3165

¹ This transaction was executed in multiple trades at prices ranging from \$3.60 – 3.61.

² This transaction was executed in multiple trades at prices ranging from \$3.60 – 3.65.

³ This transaction was executed in multiple trades at prices ranging from \$3.63 – 3.66.

⁴ This transaction was executed in multiple trades at prices ranging from \$3.59 – 3.62.

⁵ This transaction was executed in multiple trades at prices ranging from \$3.58 – 3.60.

⁶ This transaction was executed in multiple trades at prices ranging from \$3.55 – 3.56.

⁷ This transaction was executed in multiple trades at prices ranging from \$3.51 – 3.55.

⁸ This transaction was executed in multiple trades at prices ranging from \$3.50 – 3.52.

⁹ This transaction was executed in multiple trades at prices ranging from \$3.69 – 3.75.

¹⁰ This transaction was executed in multiple trades at prices ranging from \$3.69 – 3.70.

¹¹ This transaction was executed in multiple trades at prices ranging from \$3.66 – 3.67.

¹² This transaction was executed in multiple trades at prices ranging from \$3.62 – 3.64.

¹³ This transaction was executed in multiple trades at prices ranging from \$3.50 – 3.58.

¹⁴ This transaction was executed in multiple trades at prices ranging from \$3.40 – 3.50.

¹⁵ This transaction was executed in multiple trades at prices ranging from \$3.22 – 3.27.

¹⁶ This transaction was executed in multiple trades at prices ranging from \$3.07 – 3.20.

¹⁷ This transaction was executed in multiple trades at prices ranging from \$2.90 – 2.99.

¹⁸ This transaction was executed in multiple trades at prices ranging from \$2.88 – 2.96.

¹⁹ This transaction was executed in multiple trades at prices ranging from \$2.87 – 3.06.

²⁰ This transaction was executed in multiple trades at prices ranging from \$3.07 – 3.10.

4/13/2012 ²¹	Purchase	\$ 3.0250	10000
4/16/2012 ²²	Purchase	\$ 2.9288	5000
4/17/2012 ²³	Purchase	\$ 2.9448	3810
4/18/2012 ²⁴	Purchase	\$ 2.9608	12809
4/19/2012 ²⁵	Purchase	\$ 3.0001	7948
4/20/2012 ²⁶	Purchase	\$ 3.0642	13671
4/23/2012 ²⁷	Purchase	\$ 2.9986	8100
4/24/2012 ²⁸	Purchase	\$ 2.9980	4109
4/25/2012 ²⁹	Purchase	\$ 3.0135	10046
4/26/2012 ³⁰	Purchase	\$ 3.0535	11100
4/27/2012 ³¹	Purchase	\$ 3.3088	12800
4/30/2012 ³²	Purchase	\$ 3.6201	25483
5/1/2012 ³³	Purchase	\$ 3.6328	10700
5/2/2012 ³⁴	Purchase	\$ 3.6400	8400
5/3/2012 ³⁵	Purchase	\$ 3.6161	13425
5/4/2012 ³⁶	Purchase	\$ 3.6230	8500
5/7/2012 ³⁷	Purchase	\$ 3.7461	16807
5/8/2012 ³⁸	Purchase	\$ 3.7436	30000
5/9/2012 ³⁹	Purchase	\$ 3.7168	25300
5/10/2012 ⁴⁰	Purchase	\$ 3.7440	6900

²¹ This transaction was executed in multiple trades at prices ranging from \$3.00 – 3.05.

²² This transaction was executed in multiple trades at prices ranging from \$2.89 – 2.96.

²³ This transaction was executed in multiple trades at prices ranging from \$2.93 – 2.95.

²⁴ This transaction was executed in multiple trades at prices ranging from \$2.95 – 2.99.

²⁵ This transaction was executed in multiple trades at prices ranging from \$3.00 – 3.01.

²⁶ This transaction was executed in multiple trades at prices ranging from \$2.80 – 3.10.

²⁷ This transaction was executed in multiple trades at prices ranging from \$2.95 – 3.02.

²⁸ This transaction was executed in multiple trades at prices ranging from \$2.98 – 3.00.

²⁹ This transaction was executed in multiple trades at prices ranging from \$2.98 – 3.04.

³⁰ This transaction was executed in multiple trades at prices ranging from \$3.04 – 3.16.

³¹ This transaction was executed in multiple trades at prices ranging from \$3.25 – 3.36.

³² This transaction was executed in multiple trades at prices ranging from \$3.40 – 3.65.

³³ This transaction was executed in multiple trades at prices ranging from \$3.58 – 3.65.

³⁴ Executions not available.

³⁵ This transaction was executed in multiple trades at prices ranging from \$3.60 – 3.79.

³⁶ Executions not available.

³⁷ This transaction was executed in multiple trades at prices ranging from \$3.60 – 3.85.

³⁸ This transaction was executed in multiple trades at prices ranging from \$3.72 – 3.76.

³⁹ This transaction was executed in multiple trades at prices ranging from \$3.65 – 3.75.

⁴⁰ This transaction was executed in multiple trades at prices ranging from \$3.70 – 3.79.

JOINT FILING AGREEMENT

The undersigned hereby agree to the joint filing of the Schedule 13D to which this Agreement is attached.

Dated: May 11, 2012

DISCOVERY GROUP I, LLC

By: /s/ Michael R. Murphy*

Michael R. Murphy
Managing Member

Daniel J. Donoghue*

Daniel J. Donoghue*

Michael R. Murphy*

Michael R. Murphy

By: /s/ Mark Buckley

Mark Buckley
Attorney-in-Fact for Daniel J. Donoghue
Attorney-in-Fact for Michael R. Murphy

POWER OF ATTORNEY

The undersigned, Daniel J. Donoghue, hereby appoints Mark Buckley his true and lawful attorney-in-fact and agent, with full power to execute and file with the United States Securities and Exchange Commission and any stock exchange or similar authority, for and on his behalf in any and all capacities, any and all reports required to be filed pursuant to Section 13 of the Securities Exchange Act of 1934 and the rules thereunder on Schedule 13D or 13G, any and all amendments to such reports, with all exhibits, and any other forms or documents as may be necessary in connection with the filing of such reports with the United States Securities and Exchange Commission and any stock exchange or similar authority, granting unto said attorney full power and authority to do and perform any and all acts for and on behalf of the undersigned which may be necessary or desirable to complete, as fully as the undersigned might or could do in person.

This Power of Attorney shall remain in full force and effect until revoked by the undersigned in a signed writing delivered to the foregoing attorney-in-fact and agent.

IN WITNESS WHEREOF the undersigned has caused this Power of Attorney to be executed this 28th day of April, 2008.

/s/ Daniel J. Donoghue

Daniel J. Donoghue

STATE OF)
ILLINOIS)
) SS.
COUNTY OF)
COOK)

I, Kareema M. Cruz, a Notary Public in and for the County of Cook, State of Illinois, DO HEREBY CERTIFY that Daniel J. Donoghue, who is personally known to me to be the same person whose name is subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that he signed and delivered the said instrument as his own free and voluntary act, for the uses and purposes therein set forth.

Given under my hand and notarial seal, this 28th day of April, 2008.

/s/ Kareema M. Cruz

Notary Public

POWER OF ATTORNEY

The undersigned, Michael R. Murphy, hereby appoints Mark Buckley his true and lawful attorney-in-fact and agent, with full power to execute and file with the United States Securities and Exchange Commission and any stock exchange or similar authority, for and on his behalf in any and all capacities, any and all reports required to be filed pursuant to Section 13 of the Securities Exchange Act of 1934 and the rules thereunder on Schedule 13D or 13G, any and all amendments to such reports, with all exhibits, and any other forms or documents as may be necessary in connection with the filing of such reports with the United States Securities and Exchange Commission and any stock exchange or similar authority, granting unto said attorney full power and authority to do and perform any and all acts for and on behalf of the undersigned which may be necessary or desirable to complete, as fully as the undersigned might or could do in person.

This Power of Attorney shall remain in full force and effect until revoked by the undersigned in a signed writing delivered to the foregoing attorney-in-fact and agent.

IN WITNESS WHEREOF the undersigned has caused this Power of Attorney to be executed this 28th day of April, 2008.

/s/ Michael R. Murphy

Michael R. Murphy

STATE OF)
ILLINOIS)
) SS.
COUNTY OF)
COOK)

I, Kareema M. Cruz, a Notary Public in and for the County of Cook, State of Illinois, DO HEREBY CERTIFY that Michael R. Murphy, who is personally known to me to be the same person whose name is subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that he signed and delivered the said instrument as his own free and voluntary act, for the uses and purposes therein set forth.

Given under my hand and notarial seal, this 28th day of April, 2008.

/s/ Kareema M. Cruz

Notary Public