

MASSMUTUAL PARTICIPATION INVESTORS

Form N-30D

November 24, 2010

MassMutual
Participation Investors

Report for the
Nine Months Ended September 30, 2010

LOGO

ADVISER

Babson Capital Management LLC *
1500 Main Street, P.O. Box 15189
Springfield, Massachusetts 01115-5189

INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

KPMG LLP
Boston, Massachusetts 02110

COUNSEL TO THE TRUST

Ropes & Gray LLP
Boston, Massachusetts 02110

CUSTODIAN

Citibank, N.A.
New York, New York 10043

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TRANSFER AGENT & REGISTRAR
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MassMutual Participation Investors
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Springfield, Massachusetts 01115
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* Member of the MassMutual Financial Group

INVESTMENT OBJECTIVE AND POLICY

MassMutual Participation Investors (the "Trust") is a closed-end management investment company, first offered to the public in 1988, whose shares are traded on the New York Stock Exchange under the trading symbol "MPV". The Trust's share price can be found in the financial section of most newspapers as "MassPrt" or "MassMuPrt" under either the New York Stock Exchange listings or Closed-End Fund Listings.

The Trust's investment objective is to maximize total return by providing a high level of current income, the potential for growth of income, and capital appreciation. The Trust's principal investments are privately placed, below-investment grade, long-term debt obligations purchased directly from their issuers, which tend to be smaller companies. At least half of these investments normally include equity features such as common stock, warrants, conversion rights, or other equity features that provide the Trust with the opportunity to realize capital gains. The Trust will also invest in publicly traded debt securities (including high yield securities), again with an emphasis on those with equity features, and in convertible preferred stocks and, subject to certain limitations, readily marketable equity securities. Below-investment grade or high yield securities have predominantly speculative characteristics with respect to the capacity of the issuer to pay interest and repay principal. In addition, the Trust may temporarily invest in high quality, readily marketable securities.

Babson Capital Management LLC ("Babson Capital") manages the Trust on a total return basis. The Trust distributes substantially all of its net income to shareholders each year. Accordingly, the Trust pays dividends to shareholders in January, May, August, and November. All registered shareholders are automatically enrolled in the Dividend Reinvestment and Cash Purchase Plan unless cash distributions are requested.

FORM N-Q

The Trust files its complete schedule of portfolio holdings with the U.S. Securities and Exchange Commission ("SEC") for the first and third quarters of each fiscal year on Form N-Q. This information is available (i) on the SEC's website at <http://www.sec.gov>; and (ii) at the SEC's Public Reference Room in Washington, DC (which information on their operation may be obtained by calling 1-800-SEC-0330). A complete schedule of portfolio holdings as of each quarter-end is available upon request by calling, toll-free, 866-399-1516.

PROXY VOTING POLICIES & PROCEDURES; PROXY VOTING RECORD

The Trustees of the Trust have delegated proxy voting responsibilities relating to the voting of securities held by the Trust to Babson Capital. A description of Babson Capital's proxy voting policies and procedures is available (1)

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without charge, upon request, by calling, toll-free 866-399-1516; (2) on the Trust's website: <http://www.babsoncapital.com/mpv>; and (3) on the SEC's website at <http://www.sec.gov>. Information regarding how the Trust voted proxies relating to portfolio securities during the most recent 12-month period ended June 30 is available (1) on the Trust's website: <http://www.babsoncapital.com/mpv>; and (2) on the SEC's website at <http://www.sec.gov>.

MPV
LISTED
NYSE
THE NEW YORK STOCK EXCHANGE

TO OUR SHAREHOLDERS

MassMutual Participation Investors

October 31, 2010

We are pleased to present the September 30, 2010 Quarterly Report of MassMutual Participation Investors (the "Trust"). The Board of Trustees declared a quarterly dividend of 25 cents per share, payable on November 12, 2010 to shareholders of record on November 1, 2010. The Trust paid a 25 cent per share dividend for the preceding quarter. The Trust earned 25 cents per share of net investment income for the third quarter of 2010, compared to 24 cents per share in the previous quarter.

During the third quarter, the net assets of the Trust increased to \$120,460,047 or \$12.00 per share compared to \$114,929,455 or \$11.47 per share on June 30, 2010. This translates into a 6.9% total return for the quarter, based on the change in the Trust's net assets assuming the reinvestment of all dividends. Longer term, the Trust returned 16.9%, 5.7%, 10.2%, and 11.8% for the 1-, 3-, 5-, and 10-year time periods, respectively, based on the change in the Trust's net assets assuming the reinvestment of all dividends.

The Trust's share price increased 7.1% during the quarter, from \$12.91 per share as of June 30, 2010 to \$13.83 per share as of September 30, 2010. The Trust's market price of \$13.83 per share equates to a 15.3% premium over the September 30, 2010 net asset value per share of \$12.00. The Trust's average quarter-end premium for the 3, 5 and 10- year periods was 1.54%, 5.92% and 7.88%, respectively. U.S. equity markets, as approximated by the Russell 2000 Index, increased 11.3% for the quarter. U.S. fixed income markets, as approximated by the Barclays Capital U.S. Corporate High Yield Index, increased 6.7% for the quarter.

The Trust closed four new private placement investments and two "follow-on" investments in existing portfolio companies during the third quarter. The four new investments were in Associated Diversified Services, Barcodes Group, Inc., F F C Holding Corporation and MBWS Ultimate Holdco, Inc., while the two follow-on investments were in Northwest Mailing Services, Inc. and Pacific Consolidated Holdings LLC. A brief description of these investments can be found in the Consolidated Schedule of Investments. The total amount invested by the Trust in these six transactions was \$3,808,000.

As evidenced by the increased level of new investment activity, our deal flow during the third quarter was very robust, and has remained so as we moved into the fourth quarter. A variety of factors, including upcoming possible tax law changes, renewed vigor from private equity buyers after 12-18 months of limited activity, and the presence of cash-rich strategic buyers, have contributed to the high level of transaction volume. Of course, without an adequate supply of debt and equity capital, strong deal flow does not translate into new investments. Fortunately, there currently is a plentiful supply of equity capital. The availability of debt capital, particularly senior debt, has continued to improve and is adequate to meet the needs of the market. As a result, we currently are very busy processing new transactions and expect that

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our efforts will result in a number of attractive new investments for the Trust in the fourth quarter of 2010. Barring any external shocks, we expect our investment activity to remain strong into 2011. Leverage multiples continued to increase during the quarter, but not to what we would view as excessive levels. Pricing and return expectations for new investments were stable during the quarter, and remain relatively favorable in our view. All in all, conditions are favorable for new investment activity.

The condition of our existing portfolio continued to improve in the third quarter. Sales and earnings for most of our portfolio companies have trended upward so far in 2010, after showing a deteriorating trend for all of 2009. It continues to be particularly refreshing to see some of our companies which had underperformed expectations begin to show improved results. Patience and, in certain cases, additional equity support from the equity sponsor group sometimes coupled with the deferral of interest on our debt obligations, has proven to be the right approach to helping these companies rebound. We had several more instances during the quarter in which companies which had stopped paying

(Continued)

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cash interest on our debt obligations resumed payment due to their improved operating results and liquidity position. Realization activity, which generally correlates highly with improved performance, also remained strong during the quarter. There were three companies in the Trust's portfolio, Diversco, Inc., K-Tek Holding Corporation, and Waggin' Train Holdings LLC, which were successfully sold during the quarter. One additional company, PAS Holdco LLC, was also sold for a nice gain in the first week of October. There continues to be a significant number of portfolio companies that are in various stages of a sale process and we are hopeful that many of these will turn into successful realizations in the upcoming quarters.

Certainly market conditions are constantly changing. As I have stated in prior quarters though, we will not waver in our approach to investing - we will continue to maintain the same discipline and investment philosophy that has served the Trust's shareholders well for so many years. Thank you for your continued interest in and support of MassMutual Participation Investors.

Sincerely,

/s/ Michael L. Klofas

Michael L. Klofas
President

PORTFOLIO COMPOSITION AS OF 9/30/10 *

[PIE CHART APPEARS HERE]

PRIVATE / RESTRICTED
EQUITY
12.4%

PUBLIC EQUITY
0.4%

CASH & SHORT TERM
INVESTMENTS
3.5%

PRIVATE / 144A HIGH
YIELD DEBT
69.5%

PUBLIC HIGH YIELD
DEBT
14.2%

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* Based on market value of total investments (including cash)
 Cautionary Notice: Certain statements contained in this report may be "forward looking" statements. Investors are cautioned not to place undue reliance on forward-looking statements, which speak only as of the date on which they are made and which reflect management's current estimates, projections, expectations or beliefs, and which are subject to risks and uncertainties that may cause actual results to differ materially. These statements are subject to change at any time based upon economic, market or other conditions and may not be relied upon as investment advice or an indication of the Trust's trading intent. References to specific securities are not recommendations of such securities, and may not be representative of the Trust's current or future investments. We undertake no obligation to publicly update forward looking statements, whether as a result of new information, future events, or otherwise.

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CONSOLIDATED STATEMENT OF ASSETS AND LIABILITIES
 SEPTEMBER 30, 2010
 (UNAUDITED)

MassMutual Participation Investors

ASSETS:

| | |
|---|----------------|
| Investments | |
| (See Consolidated Schedule of Investments) | |
| Corporate restricted securities at fair value | |
| (Cost - \$115,205,680) | \$ 103,182,218 |
| Corporate restricted securities at market value | |
| (Cost - \$3,352,463) | 3,499,457 |
| Corporate public securities at market value | |
| (Cost - \$19,007,782) | 19,036,105 |
| | ----- |
| | 125,717,780 |
| Cash | 4,543,267 |
| Interest receivable | 3,163,774 |
| Receivable for investments sold | 49,542 |
| Other assets | 6,269 |
| | ----- |
| | 133,480,632 |
| | ----- |

LIABILITIES:

| | |
|---------------------------------|------------|
| Investment advisory fee payable | 271,035 |
| Note payable | 12,000,000 |
| Interest payable | 262,933 |
| Accrued taxes payable | 331,168 |
| Accrued expenses | 136,058 |
| Other payables | 19,391 |
| | ----- |
| | 13,020,585 |
| | ----- |

TOTAL LIABILITIES

TOTAL NET ASSETS

\$ 120,460,047
 =====

NET ASSETS:

| | |
|--|------------|
| Common shares, par value \$.01 per share; an unlimited number authorized | \$ 100,346 |
| Additional paid-in capital | 93,724,310 |
| Retained net realized gain on investments, prior years | 32,871,737 |

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| | |
|--|----------------|
| Undistributed net investment income | 3,585,421 |
| Accumulated net realized gain on investments | 2,026,378 |
| Net unrealized depreciation of investments | (11,848,145) |
| | ----- |
| TOTAL NET ASSETS | \$ 120,460,047 |
| | ===== |
| COMMON SHARES ISSUED AND OUTSTANDING | 10,034,604 |
| | ===== |
| NET ASSET VALUE PER SHARE | \$ 12.00 |
| | ===== |

See Notes to Consolidated Financial Statements

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CONSOLIDATED STATEMENT OF OPERATIONS
FOR THE NINE MONTHS ENDED SEPTEMBER 30, 2010
(UNAUDITED)

| | |
|---|---------------|
| INVESTMENT INCOME: | |
| Interest | \$ 8,904,831 |
| Dividends | 79,087 |
| Other | 36,734 |
| | ----- |
| TOTAL INVESTMENT INCOME | 9,020,652 |
| | ----- |
| EXPENSES: | |
| Investment advisory fees | 781,559 |
| Interest | 522,000 |
| Trustees' fees and expenses | 149,152 |
| Professional fees | 103,500 |
| Reports to shareholders | 83,000 |
| Custodian fees | 18,000 |
| Transfer agent/registrar's expenses | 13,500 |
| Other | 31,759 |
| | ----- |
| TOTAL EXPENSES | 1,702,470 |
| | ----- |
| INVESTMENT INCOME - NET | 7,318,182 |
| | ----- |
| NET REALIZED AND UNREALIZED GAIN ON INVESTMENTS: | |
| Net realized gain on investments before taxes | 2,092,662 |
| Income tax expense | (333,717) |
| | ----- |
| Net realized gain on investments after taxes | 1,758,945 |
| Net change in unrealized depreciation of investments before taxes | 6,753,151 |
| Net change in deferred income tax expense | 84,963 |
| | ----- |
| Net change in unrealized depreciation of investments after taxes | 6,838,114 |
| | ----- |
| NET GAIN ON INVESTMENTS | 8,579,059 |
| | ----- |
| NET INCREASE IN NET ASSETS RESULTING FROM OPERATIONS | \$ 15,915,241 |
| | ===== |

See Notes to Consolidated Financial Statements

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CONSOLIDATED STATEMENT OF CASH FLOWS MassMutual Participation Investors
 FOR THE NINE MONTHS ENDED SEPTEMBER 30, 2010
 (UNAUDITED)

| | |
|--|---------------|
| NET INCREASE IN CASH: | |
| Cash flows from operating activities: | |
| Purchases/Proceeds/Maturities from short-term portfolio securities, net | \$ 7,529,400 |
| Purchases of portfolio securities | (20,506,031) |
| Proceeds from disposition of portfolio securities | 15,642,979 |
| Interest, dividends and other income received | 7,066,351 |
| Interest expense paid | (348,000) |
| Operating expenses paid | (1,207,746) |
| Income taxes paid | (38,549) |
| NET CASH PROVIDED BY OPERATING ACTIVITIES | 8,138,404 |
| Cash flows from financing activities: | |
| Cash dividends paid from net investment income | (7,500,695) |
| Receipts for shares issued on reinvestment of dividends | 624,316 |
| NET CASH USED FOR FINANCING ACTIVITIES | (6,876,379) |
| NET INCREASE IN CASH | 1,262,025 |
| Cash - beginning of year | 3,281,242 |
| CASH - END OF PERIOD | \$ 4,543,267 |
| RECONCILIATION OF NET INCREASE IN NET ASSETS TO NET CASH PROVIDED BY OPERATING ACTIVITIES: | |
| NET INCREASE IN NET ASSETS RESULTING FROM OPERATIONS | \$ 15,915,241 |
| Increase in investments | (6,475,719) |
| Increase in interest receivable | (1,641,579) |
| Increase in receivable for investments sold | (3,929) |
| Increase in other assets | (6,269) |
| Increase in investment advisory fee payable | 26,698 |
| Increase in interest payable | 174,000 |
| Decrease in accrued expenses | (21,514) |
| Increase in accrued taxes payable | 210,205 |
| Decrease in other payables | (38,730) |
| TOTAL ADJUSTMENTS TO NET ASSETS FROM OPERATIONS | (7,776,837) |
| NET CASH PROVIDED BY OPERATING ACTIVITIES | \$ 8,138,404 |

See Notes to Consolidated Financial Statements

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CONSOLIDATED STATEMENTS OF CHANGES IN NET ASSETS

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| | For the nine months ended 09/30/10 (Unaudited) | For the year ended 12/31/09 |
|---|---|-----------------------------------|
| | ----- | ----- |
| INCREASE (DECREASE) IN NET ASSETS: | | |
| Operations: | | |
| Investment income - net | \$ 7,318,182 | \$ 9,375,528 |
| Net realized gain on investments | 1,758,945 | 1,012,575 |
| Net change in unrealized depreciation of investments | 6,838,114 | (2,299,878) |
| | ----- | ----- |
| Net increase in net assets resulting from operations | 15,915,241 | 8,088,225 |
| Increase from common shares issued on reinvestment of dividends | | |
| Common shares issued (2010 - 51,365; 2009 - 55,996) | 624,316 | 616,488 |
| Dividends to shareholders from: | | |
| Net investment income (2010 - \$0.50 per share; 2009 - \$1.00 per share) | (5,004,885) | (9,955,268) |
| | ----- | ----- |
| TOTAL INCREASE (DECREASE) IN NET ASSETS | 11,534,672 | (1,250,555) |
| NET ASSETS, BEGINNING OF YEAR | 108,925,375 | 110,175,930 |
| | ----- | ----- |
| NET ASSETS, END OF PERIOD/YEAR (including undistributed net investment income of \$3,585,421 and \$1,272,124, respectively) | \$ 120,460,047 | \$ 108,925,375 |
| | ===== | ===== |

See Notes to Consolidated Financial Statements

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CONSOLIDATED SELECTED FINANCIAL HIGHLIGHTS MassMutual Participation Investors
SELECTED DATA FOR EACH SHARE OF BENEFICIAL INTEREST OUTSTANDING:

| | For the nine months ended 09/30/2010 (Unaudited) | For the years ended De | | |
|--|--|------------------------|----------|----------|
| | ----- | 2009 | 2008 | 2007 |
| | ----- | ----- | ----- | ----- |
| Net asset value: | | | | |
| Beginning of year | \$ 10.91 | \$ 11.10 | \$ 12.84 | \$ 12.90 |
| | ----- | ----- | ----- | ----- |
| Net investment income (a) | 0.73 | 0.94 | 1.08 | 1.23 |
| Net realized and unrealized | | | | |
| gain (loss) on investments | 0.86 | (0.13) | (1.82) | (0.05) |
| | ----- | ----- | ----- | ----- |
| Total from investment operations | 1.59 | 0.81 | (0.74) | 1.18 |
| | ----- | ----- | ----- | ----- |
| Dividends from net investment income to common shareholders | (0.50) | (1.00) | (1.00) | (1.23) |
| Dividends from net realized gain on investments to common shareholders | -- | -- | -- | (0.02) |

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| | | | | |
|---|-----------|-----------|-----------|-----------|
| Increase from dividends reinvested | 0.00 (c) | 0.00 (c) | 0.00 (c) | 0.01 |
| | ----- | ----- | ----- | ----- |
| Total dividends | (0.50) | (1.00) | (1.00) | (1.24) |
| | ----- | ----- | ----- | ----- |
| Net asset value: End of period/year | \$ 12.00 | \$ 10.91 | \$ 11.10 | \$ 12.84 |
| | ----- | ----- | ----- | ----- |
| Per share market value: | | | | |
| End of period/year | \$ 13.83 | \$ 12.20 | \$ 9.05 | \$ 13.18 |
| | ===== | ===== | ===== | ===== |
| Total investment return | | | | |
| Net asset value (d) | 14.95% | 7.60% | (6.01%) | 9.95% |
| Market value | 13.36% | 40.86% | (25.36%) | (1.30%) |
| Net assets (in millions): | | | | |
| End of period/year | \$ 120.46 | \$ 108.93 | \$ 110.18 | \$ 126.63 |
| Ratio of operating expenses to average net assets | 1.40% (e) | 1.41% | 1.33% | 1.36% |
| Ratio of interest expense to average net assets | 0.62% (e) | 0.63% | 0.58% | 0.56% |
| Ratio of income tax expense to average net assets (f) | 0.40% (e) | 0.00% | 0.00% | 0.48% |
| Ratio of total expenses before custodian fee reduction to average net assets (f) | 2.42% (e) | 2.04% | 1.91% | 2.40% |
| Ratio of net expenses after custodian fee reduction to average net assets (f) | 2.42% (e) | 2.04% | 1.91% | 2.40% |
| Ratio of net investment income to average net assets | 8.67% (e) | 8.55% | 8.74% | 9.32% |
| Portfolio turnover | 13% | 23% | 32% | 33% |

(a) Calculated using average shares.

(b) Amount includes \$0.10 per share in litigation proceeds.

(c) Rounds to less than \$0.01 per share.

(d) Net asset value return represents portfolio returns based on change in the Trust's net asset value, net of all dividends and distributions which differs from the total investment return based on the Trust's net asset value, net of the difference between the Trust's net asset value and the market value of its shares outstanding, net of the effect of future results.

(e) Annualized

(f) As additional information, this ratio is included to reflect the taxes paid on retained long-term capital gains, netted against realized capital gains in the Statement of Operations. The taxes paid are treated as a credit for the taxes paid is passed on to shareholders.

Senior borrowings:

| | | | | |
|--------------------------------------|-------|-------|-------|-------|
| Total principal amount (in millions) | \$ 12 | \$ 12 | \$ 12 | \$ 12 |
|--------------------------------------|-------|-------|-------|-------|

Asset coverage per \$1,000

| | | | | |
|-----------------|-----------|-----------|-----------|-----------|
| of indebtedness | \$ 11,038 | \$ 10,077 | \$ 10,181 | \$ 11,552 |
|-----------------|-----------|-----------|-----------|-----------|

See Notes to Consolidated Financial Statements

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CONSOLIDATED SCHEDULE OF INVESTMENTS

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September 30, 2010
(Unaudited)

| | Principal Amount Shares, Units or Ownership Percentage ----- | Acquisition Date ----- |
|---|--|------------------------------|
| CORPORATE RESTRICTED SECURITIES - 88.56%:(A) | | |
| PRIVATE PLACEMENT INVESTMENTS - 85.66% | | |
| A E COMPANY, INC. | | |
| A designer and manufacturer of machined parts and assembly structures for the commercial and military markets. | | |
| 11% Senior Secured Note due 2015 | \$ 807,692 | * |
| 13% Senior Subordinated Note due 2016 | \$ 807,693 | 11/10/09 |
| Common Stock (B) | 184,615 shs. | 11/10/09 |
| Warrant, exercisable until 2019, to purchase common stock at \$.01 per share (B) | 92,308 shs. | 11/10/09 |
| * 11/10/09 and 11/18/09. | | |
| A H C HOLDING COMPANY, INC. | | |
| A designer and manufacturer of boilers and water heaters for the commercial sector. | | |
| 15% Senior Subordinated Note due 2015 | \$ 1,342,450 | 11/21/07 |
| Limited Partnership Interest (B) | 12.26% int. | 11/21/07 |
| A S A P INDUSTRIES LLC | | |
| A designer and manufacturer of components used on oil and natural gas wells. | | |
| 12.5% Senior Subordinated Note due 2015 | \$ 450,500 | 12/31/08 |
| Limited Liability Company Unit Class A-2 (B) | 677 uts. | 12/31/08 |
| Limited Liability Company Unit Class A-3 (B) | 608 uts. | 12/31/08 |
| A S C GROUP, INC. | | |
| A designer and manufacturer of high reliability encryption equipment, communications products, components primarily for the military and aerospace sectors. | | |
| 12.75% Senior Subordinated Note due 2016 | \$ 1,227,273 | 10/09/09 |
| Limited Liability Company Unit Class A (B) | 1,249 uts. | 10/09/09 |
| Limited Liability Company Unit Class B (B) | 1,473 uts. | 10/09/09 |
| A W X HOLDINGS CORPORATION | | |
| A provider of aerial equipment rental, sales and repair services to non-residential construction operating in the State of Indiana. | | |
| 10.5% Senior Secured Term Note due 2014 (D) | \$ 420,000 | 05/15/08 |
| 13% Senior Subordinated Note due 2015 (D) | \$ 420,000 | 05/15/08 |
| Common Stock (B) | 60,000 shs. | 05/15/08 |
| Warrant, exercisable until 2015, to purchase common stock at \$.01 per share (B) | 21,099 shs. | 05/15/08 |

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CONSOLIDATED SCHEDULE OF INVESTMENTS (CONTINUED)
 September 30, 2010
 (Unaudited)

| CORPORATE RESTRICTED SECURITIES: (A) (Continued) | Principal Amount Shares, Units or Ownership Percentage ----- | Acquisition Date ----- |
|---|--|------------------------------|
| ADVANCED TECHNOLOGIES HOLDINGS | | |
| A provider of factory maintenance services to industrial companies. | | |
| 15% Senior Subordinated Note due 2013 | \$ 1,172,906 | 12/27/07 |
| Preferred Stock (B) | 546 shs. | 12/27/07 |
| | | |
| AERO HOLDINGS, INC. | | |
| A provider of geospatial services to corporate and government clients. | | |
| 10.5% Senior Secured Term Note due 2014 | \$ 930,000 | 03/09/07 |
| 14% Senior Subordinated Note due 2015 | \$ 720,000 | 03/09/07 |
| Common Stock (B) | 150,000 shs. | 03/09/07 |
| Warrant, exercisable until 2015, to purchase common stock at \$.01 per share (B) | 37,780 shs. | 03/09/07 |
| | | |
| ALL CURRENT HOLDING COMPANY | | |
| A specialty re-seller of essential electrical parts and components primarily serving wholesale di | | |
| 12% Senior Subordinated Note due 2015 | \$ 603,697 | 09/26/08 |
| Common Stock (B) | 713 shs. | 09/26/08 |
| Warrant, exercisable until 2018, to purchase common stock at \$.01 per share (B) | 507 shs. | 09/26/08 |
| | | |
| AMERICAN HOSPICE MANAGEMENT HOLDING LLC | | |
| A for-profit hospice care provider in the United States. | | |
| 12% Senior Subordinated Note due 2013 | \$ 1,687,503 | * |
| Preferred Class A Unit (B) | 1,706 uts. | ** |
| Preferred Class B Unit (B) | 808 uts. | 06/09/08 |
| Common Class B Unit (B) | 16,100 uts. | 01/22/04 |
| Common Class D Unit (B) | 3,690 uts. | 09/12/06 |
| | | |
| * 01/22/04 and 06/09/08. ** 01/22/04 and 09/12/06. | | |
| | | |
| APEX ANALYTIX HOLDING CORPORATION | | |
| A provider of audit recovery and fraud detection services and software to commercial and retail b | | |
| 12.5% Senior Subordinated Note due 2016 | \$ 1,012,500 | 04/28/09 |
| Preferred Stock Series B (B) | 1,623 shs. | 04/28/09 |
| Common Stock (B) | 723 shs. | 04/28/09 |

CONSOLIDATED SCHEDULE OF INVESTMENTS (CONTINUED)
 September 30, 2010
 (Unaudited)

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| CORPORATE RESTRICTED SECURITIES: (A) (Continued) | Principal Amount Shares, Units or Ownership Percentage ----- | Acquisition Date ----- |
|---|--|------------------------------|
| ARROW TRU-LINE HOLDINGS, INC. | | |
| A manufacturer of hardware for residential and commercial overhead garage doors in North America. | | |
| 12% Senior Subordinated Note due 2012 | \$ 984,209 | 05/18/05 |
| Preferred Stock (B) | 33 shs. | 10/16/09 |
| Common Stock (B) | 263 shs. | 05/18/05 |
| Warrant, exercisable until 2012, to purchase common stock at \$.01 per share (B) | 69 shs. | 05/18/05 |
| ASSOCIATED DIVERSIFIED SERVICES | | |
| A provider of routine maintenance and repair services primarily to electric utility companies pre distribution lines. | | |
| 10% Senior Secured Term Note due 2016 (C) | \$ 323,700 | 09/30/10 |
| 13% Senior Subordinated Note due 2017 | \$ 296,180 | 09/30/10 |
| Limited Liability Company Unit Class B (B) | 36,000 uts. | 09/30/10 |
| Limited Liability Company Unit Class B OID (B) | 27,520 uts. | 09/30/10 |
| BARCODES GROUP, INC. | | |
| A distributor and reseller of automatic identification and data capture equipment, including mobil point-of-sale systems, labels, and accessories. | | |
| 13.5% Senior Subordinated Note due 2016 | \$ 638,651 | 07/27/10 |
| Preferred Stock (B) | 13 shs. | 07/27/10 |
| Common Stock Class A (B) | 44 shs. | 07/27/10 |
| Warrant, exercisable until 2020, to purchase common stock at \$.01 per share (B) | 8 shs. | 07/27/10 |
| BRAVO SPORTS HOLDING CORPORATION | | |
| A designer and marketer of niche branded consumer products including canopies, trampolines, in-li urethane wheels. | | |
| 12.5% Senior Subordinated Note due 2014 | \$ 1,207,902 | 06/30/06 |
| Preferred Stock Class A (B) | 465 shs. | 06/30/06 |
| Common Stock (B) | 1 sh. | 06/30/06 |
| Warrant, exercisable until 2014, to purchase common stock at \$.01 per share (B) | 164 shs. | 06/30/06 |
| C D N T, INC. | | |
| A value-added converter and distributor of specialty pressure sensitive adhesives, foams, films, 10.5% Senior Secured Term Note due 2014 | | |
| 12.5% Senior Subordinated Note due 2015 | \$ 377,112 | 08/07/08 |
| Common Stock (B) | \$ 429,070 | 08/07/08 |
| Warrant, exercisable until 2018, to purchase common stock at \$.01 per share (B) | 41,860 shs. | 08/07/08 |
| | 32,914 shs. | 08/07/08 |

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MassMutual Participation Investors

CONSOLIDATED SCHEDULE OF INVESTMENTS (CONTINUED)
 September 30, 2010
 (Unaudited)

| | Principal Amount Shares, Units or Ownership Percentage ----- | Acquisition Date ----- |
|---|--|------------------------------|
| CORPORATE RESTRICTED SECURITIES: (A) (Continued) | | |
| CAPITAL SPECIALTY PLASTICS, INC. | | |
| A producer of desiccant strips used for packaging pharmaceutical products. | | |
| Common Stock (B) | 55 shs. | * |
| *12/30/97 and 05/29/99. | | |
| CLOUGH, HARBOUR AND ASSOCIATES | | |
| An engineering service firm that is located in Albany, NY. | | |
| 12.25% Senior Subordinated Note due 2015 | \$ 1,270,588 | 12/02/08 |
| Preferred Stock (B) | 147 shs. | 12/02/08 |
| COEUR, INC. | | |
| A producer of proprietary, disposable power injection syringes. | | |
| 12% Senior Subordinated Note due 2016 | \$ 642,857 | 10/10/08 |
| Common Stock (B) | 321 shs. | 10/10/08 |
| Warrant, exercisable until 2018, to purchase common stock at \$.01 per share (B) | 495 shs. | 10/10/08 |
| CONNECTICUT ELECTRIC, INC. | | |
| A supplier and distributor of electrical products sold into the retail and wholesale markets. | | |
| 10% Senior Subordinated Note due 2014 (D) | \$ 771,051 | 01/12/07 |
| Limited Liability Company Unit Class A (B) | 82,613 uts. | 01/12/07 |
| Limited Liability Company Unit Class C (B) | 59,756 uts. | 01/12/07 |
| Limited Liability Company Unit Class D (B) | 671,525 uts. | 05/03/10 |
| Limited Liability Company Unit Class E (B) | 1,102 uts. | 05/03/10 |
| CONNOR SPORT COURT INTERNATIONAL, INC. | | |
| A designer and manufacturer of outdoor and indoor synthetic sports flooring and other temporary f | | |
| Preferred Stock Series B-2 (B) | 9,081 shs. | 07/05/07 |
| Preferred Stock Series C (B) | 4,757 shs. | 07/05/07 |
| Common Stock (B) | 380 shs. | 07/05/07 |
| Limited Partnership Interest (B) | 6.88% int. | * |
| *08/12/04 and 01/14/05. | | |
| COREPHARMA LLC | | |
| A manufacturer of oral dose generic pharmaceuticals targeted at niche applications. | | |
| 12% Senior Subordinated Note due 2013 | \$ 1,350,000 | 08/04/05 |
| Warrant, exercisable until 2013, to purchase common stock at \$.001 per share (B) | 10 shs. | 08/04/05 |

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 CONSOLIDATED SCHEDULE OF INVESTMENTS (CONTINUED)
 September 30, 2010
 (Unaudited)

| CORPORATE RESTRICTED SECURITIES: (A) (Continued) | Principal Amount Shares, Units or Ownership Percentage ----- | Acquisition Date ----- |
|--|--|------------------------------|
| CRANE RENTAL CORPORATION | | |
| A crane rental company. | | |
| 13% Senior Subordinated Note due 2015 | \$ 1,215,000 | 08/21/08 |
| Common Stock (B) | 135,000 shs. | 08/21/08 |
| Warrant, exercisable until 2016, to purchase common stock at \$.01 per share (B) | 72,037 shs. | 08/21/08 |
| CUSTOM ENGINEERED WHEELS, INC. | | |
| A manufacturer of custom engineered, non-pneumatic plastic wheels and plastic tread cap tires used in products and wheelchairs. | | |
| 12.5% Senior Subordinated Note due 2016 | \$ 1,155,288 | 10/27/09 |
| Preferred Stock PIK (B) | 156 shs. | 10/27/09 |
| Preferred Stock Series A (B) | 114 shs. | 10/27/09 |
| Common Stock (B) | 38 shs. | 10/27/09 |
| Warrant, exercisable until 2016, to purchase common stock at \$.01 per share (B) | 28 shs. | 10/27/09 |
| DAVIS-STANDARD LLC | | |
| A manufacturer, assembler, and installer of a broad range of capital equipment that is used in the processing of plastic materials. | | |
| 12% Senior Subordinated Note due 2014 | \$ 978,261 | 10/30/06 |
| Limited Partnership Interest (B) | 0.97% int. | 10/30/06 |
| Warrant, exercisable until 2014, to purchase preferred stock at \$.01 per share (B) | 26 shs. | 10/30/06 |
| Warrant, exercisable until 2014, to purchase common stock at \$.01 per share (B) | 18 shs. | 10/30/06 |
| DIVERSCO, INC./DHI HOLDINGS, INC. | | |
| A contract provider of janitorial and equipment maintenance services and temporary production labor | | |
| Membership Interests of MM/Lincap Diversco Investments Ltd. LLC (B) | 13.57% int. | 08/27/98 |
| Warrants, exercisable until 2011, to purchase common stock of DHI Holdings, Inc. at \$.01 per share (B) | 6,676 shs. | * |

*10/24/96 and 08/28/98.

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CONSOLIDATED SCHEDULE OF INVESTMENTS (CONTINUED)

September 30, 2010

(Unaudited)

| | Principal Amount Shares, Units or Ownership Percentage ----- | Acquisition Date ----- |
|--|--|------------------------------|
| CORPORATE RESTRICTED SECURITIES: (A) (Continued) | | |
| DUNCAN SYSTEMS, INC. | | |
| A distributor of windshields and side glass for the recreational vehicle market. | | |
| 10% Senior Secured Term Note due 2013 | \$ 231,429 | 11/01/06 |
| 13% Senior Subordinated Note due 2014 | \$ 488,572 | 11/01/06 |
| Common Stock (B) | 102,857 shs. | 11/01/06 |
| Warrant, exercisable until 2014, to purchase common stock at \$.01 per share (B) | 32,294 shs. | 11/01/06 |
| Dwyer Group, Inc. | | |
| A franchiser of a variety of home repair services. | | |
| Common Stock (B) | 3,656 shs. | * |
| Warrant, exercisable until 2011, to purchase common stock at \$.01 per share (B) | 1,077 shs. | 10/30/03 |
| *10/30/03 and 01/02/04. | | |
| E S P HOLDCO, INC. | | |
| A manufacturer of power protection technology for commercial office equipment, primarily supplying network. | | |
| 14% Senior Subordinated Note due 2015 | \$ 1,241,169 | 01/08/08 |
| Common Stock (B) | 349 shs. | 01/08/08 |
| E X C ACQUISITION CORPORATION | | |
| A manufacturer of pre-filled syringes and pump systems used for intravenous drug delivery. | | |
| Warrant, exercisable until 2014, to purchase common stock at \$.01 per share (B) | 11 shs. | 06/28/04 |
| EATEM HOLDING COMPANY | | |
| A developer and manufacturer of savory flavor systems for soups, sauces, gravies, and other products for retail and foodservice end products. | | |
| 12.5% Senior Subordinated Note due 2018 | \$ 950,000 | 02/01/10 |
| Common Stock (B) | 50 shs. | 02/01/10 |
| Warrant, exercisable until 2018, to purchase common stock at \$.01 per share (B) | 119 shs. | 02/01/10 |
| F C X HOLDINGS CORPORATION | | |
| A distributor of specialty/technical valves, actuators, accessories, and process instrumentation high purity, and energy end markets in North America. | | |
| 15% Senior Subordinated Note due 2015 | \$ 1,186,983 | 10/06/08 |
| Preferred Stock (B) | 2,298 shs. | 10/06/08 |
| Common Stock (B) | 1,625 shs. | 10/06/08 |

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CONSOLIDATED SCHEDULE OF INVESTMENTS (CONTINUED)
 September 30, 2010
 (Unaudited)

| CORPORATE RESTRICTED SECURITIES:(A) (Continued) | Principal Amount Shares, Units or Ownership Percentage ----- | Acquisition Date ----- |
|---|--|------------------------------|
| F F C HOLDING CORPORATION | | |
| A leading U.S. manufacturer of private label frozen novelty and ice cream products. | | |
| 16% Senior Subordinated Note due 2014 | \$ 829,268 | 09/27/10 |
| Limited Liability Company Units Preferred (B) | 171 uts. | 09/27/10 |
| Limited Liability Company Units (B) | 171 uts. | 09/27/10 |
| F H S HOLDINGS LLC | | |
| A national provider of customized disease management services to large self-insured employers. | | |
| 12% Senior Subordinated Note due 2014 (D) | \$ 1,265,625 | 06/01/06 |
| Limited Liability Company Units of Linden/FHS Holdings LLC (B) | 84 uts. | 06/01/06 |
| Common Unit Class B (B) | 734 uts. | 06/01/06 |
| FLUTES, INC. | | |
| An independent manufacturer of micro fluted corrugated sheet material for the food and consumer p | | |
| 10% Senior Secured Term Note due 2013 (D) | \$ 524,791 | 04/13/06 |
| 14% Senior Subordinated Note due 2014 (D) | \$ 317,177 | 04/13/06 |
| GOLDEN COUNTY FOODS HOLDING, INC. | | |
| A manufacturer of frozen appetizers and snacks. | | |
| 16% Senior Subordinated Note due 2015 | \$ 1,012,500 | 11/01/07 |
| 16% PIK Note due 2015 | \$ 250,259 | 12/31/08 |
| 8% Series A Convertible Preferred Stock, convertible into fully diluted common shares (B) | 77,643 shs. | 11/01/07 |
| H M HOLDING COMPANY | | |
| A designer, manufacturer, and importer of promotional and wood furniture. | | |
| 7.5% Senior Subordinated Note due 2013 (D) | \$ 362,700 | 10/15/09 |
| Preferred Stock (B) | 21 shs. | * |
| Preferred Stock Series B (B) | 1,088 shs. | 10/15/09 |
| Common Stock (B) | 180 shs. | 02/10/06 |
| Common Stock Class C (B) | 296 shs. | 10/15/09 |
| Warrant, exercisable until 2013, to purchase common stock at \$.02 per share (B) | 67 shs. | 02/10/06 |
| * 09/18/07 and 06/27/08. | | |
| HIGHGATE CAPITAL LLC | | |
| An acquirer of controlling or substantial interests in manufacturing and marketing entities. | | |
| Series A Preferred Units (B) | 0.30% int. | 07/21/94 |

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 CONSOLIDATED SCHEDULE OF INVESTMENTS (CONTINUED)
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 (Unaudited)

| CORPORATE RESTRICTED SECURITIES: (A) (Continued) | Principal Amount Shares, Units or Ownership Percentage ----- | Acquisition Date ----- |
|---|--|------------------------------|
| HOME DECOR HOLDING COMPANY | | |
| A designer, manufacturer and marketer of framed art and wall decor products. | | |
| 12.5% Senior Subordinated Note due 2012 | \$ 1,081,731 | * |
| Common Stock (B) | 33 shs. | * |
| Warrant, exercisable until 2012, to purchase common stock at \$.02 per share (B) | 106 shs. | * |
| * 06/30/04 and 08/19/04. | | |
| HOSPITALITY MINTS HOLDING COMPANY | | |
| A manufacturer of individually-wrapped imprinted promotional mints. | | |
| 12% Senior Subordinated Note due 2016 | \$ 1,098,837 | 08/19/08 |
| Common Stock (B) | 251 shs. | 08/19/08 |
| Warrant, exercisable until 2016, to purchase common stock at \$.01 per share (B) | 65 shs. | 08/19/08 |
| INSURANCE CLAIMS MANAGEMENT, INC. | | |
| A third party administrator providing auto and property claim administration services for insurance | | |
| Common Stock (B) | 37 shs. | 02/27/07 |
| Warrant, exercisable until 2011, to purchase common stock at \$.01 per share (B) | 11 shs. | 02/27/07 |
| INTERNATIONAL OFFSHORE SERVICES LLC | | |
| A leading provider of marine transportation services, platform decommissioning, and salvage services in shallow waters of the Gulf of Mexico. | | |
| 14.25% Senior Subordinated Secured Note due 2017 | \$ 1,350,000 | 07/07/09 |
| Limited Liability Company Unit (B) | 1,647 uts. | 07/07/09 |
| JASON, INC. | | |
| A diversified manufacturing company serving various industrial markets. | | |
| 13% Senior Subordinated Note due 2010 (D) | \$ 510,187 | 08/04/00 |
| Limited Partnership Interest of Saw Mill Capital Fund II, L.P. (B) | 1.30% int. | 08/03/00 |
| JUSTRITE MANUFACTURING ACQUISITION CO. | | |
| A manufacturer of safety products such as storage cabinets and containers. | | |
| 12% Senior Subordinated Note due 2011 | \$ 843,750 | 12/15/04 |
| Warrant, exercisable until 2011, to purchase | | |

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common stock at \$.01 per share (B)

594 shs.

12/15/04

CONSOLIDATED SCHEDULE OF INVESTMENTS (CONTINUED)
September 30, 2010
(Unaudited)

| CORPORATE RESTRICTED SECURITIES: (A) (Continued) | Principal Amount Shares, Units or Ownership Percentage ----- | Acquisition Date ----- |
|--|--|------------------------------|
| K H O F HOLDINGS, INC. | | |
| A manufacturer of premium disposable tableware products serving both the foodservice and consumer markets. | | |
| Common Stock (B) | 116,827 shs. | 10/15/07 |
| K N B HOLDINGS CORPORATION | | |
| A designer, manufacturer and marketer of products for the custom framing market. | | |
| 15.5% Senior Subordinated Note due 2013 (D) | \$ 1,595,057 | 05/25/06 |
| Common Stock (B) | 71,053 shs. | 05/25/06 |
| Warrant, exercisable until 2013, to purchase common stock at \$.01 per share (B) | 43,600 shs. | 05/25/06 |
| K P I HOLDINGS, INC. | | |
| The largest player in the U.S. non-automotive, non-ferrous die casting segment. | | |
| 18% Senior Subordinated Note due 2014 (D) | \$ 1,115,217 | 07/16/08 |
| Convertible Preferred Stock Series C (B) | 29 shs. | 06/30/09 |
| Convertible Preferred Stock Series D (B) | 13 shs. | 09/17/09 |
| Common Stock (B) | 235 shs. | 07/15/08 |
| Warrant, exercisable until 2018, to purchase common stock at \$.01 per share (B) | 388 shs. | * |
| * 07/16/08 and 09/17/09. | | |
| K W P I HOLDINGS CORPORATION | | |
| A manufacturer and distributor of vinyl windows and patio doors throughout the northwestern United States. | | |
| 18% Senior Subordinated Note due 2014 (D) | \$ 1,555,404 | 03/14/07 |
| Common Stock (B) | 123 shs. | 03/13/07 |
| Warrant, exercisable until 2019, to purchase preferred stock at \$.01 per share (B) | 71 shs. | 07/07/09 |
| Warrant, exercisable until 2017, to purchase common stock at \$.01 per share (B) | 89 shs. | 03/14/07 |
| L H D EUROPE HOLDINGS, INC. | | |
| A non-carbonated beverage dispensing company focused on the foodservice industry. | | |
| Common Stock (B) | 45 shs. | 12/28/09 |

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CONSOLIDATED SCHEDULE OF INVESTMENTS (CONTINUED)

September 30, 2010

(Unaudited)

| | Principal Amount Shares, Units or Ownership Percentage ----- | Acquisition Date ----- |
|--|--|------------------------------|
| CORPORATE RESTRICTED SECURITIES: (A) (Continued) | | |
| M V I HOLDING, INC. | | |
| A manufacturer of large precision machined metal components used in equipment which services a va the oil and gas, mining, and defense markets. | | |
| 13% Senior Subordinated Note due 2016 | \$ 656,154 | 09/12/08 |
| Common Stock (B) | 32 shs. | 09/12/08 |
| Warrant, exercisable until 2018, to purchase common stock at \$.01 per share (B) | 35 shs. | 09/12/08 |
| MAIL COMMUNICATIONS GROUP, INC. | | |
| A provider of mail processing and handling services, lettershop services, and commercial printing | | |
| 12.5% Senior Subordinated Note due 2014 | \$ 516,177 | 05/04/07 |
| Limited Liability Company Unit (B) | 12,763 uts. | * |
| Warrant, exercisable until 2014, to purchase common stock at \$.01 per share (B) | 1,787 shs. | 05/04/07 |
| * 05/04/07 and 01/02/08. | | |
| MANHATTAN BEACHWEAR HOLDING COMPANY | | |
| A designer and distributor of women's swimwear. | | |
| 12.5% Senior Subordinated Note due 2018 | \$ 882,353 | 01/15/10 |
| Common Stock (B) | 118 shs. | 01/15/10 |
| Warrant, exercisable until 2019, to purchase common stock at \$.01 per share (B) | 104 shs. | 01/15/10 |
| MAVERICK ACQUISITION COMPANY | | |
| A manufacturer of capsules that cover the cork and neck of wine bottles. | | |
| 6.79% Senior Secured Tranche A Note due 2011 (C) | \$ 81,741 | 09/03/04 |
| 12.5% Senior Secured Tranche B Note due 2011 | \$ 179,104 | 09/03/04 |
| 6.79% Senior Secured Revolver due 2011 (C) | \$ 44,777 | 09/03/04 |
| Limited Partnership Interest (B) | 4.48% int. | 09/03/04 |
| Warrant, exercisable until 2011, to purchase common stock at \$.01 per share (B) | 243 shs. | 09/03/04 |
| MBWS ULTIMATE HOLDCO, INC. | | |
| A provider of services throughout North Dakota that address the fluid management and related tran | | |
| 12% Senior Subordinated Note due 2016 | \$ 883,721 | 09/07/10 |
| Preferred Stock Series A (B) | 1,388 shs. | 09/07/10 |
| Common Stock (B) | 153 shs. | 09/07/10 |
| Warrant, exercisable until 2016, to purchase common stock at \$.01 per share (B) | 386 shs. | 09/07/10 |

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| CORPORATE RESTRICTED SECURITIES: (A) (Continued) | Principal Amount Shares, Units or Ownership Percentage ----- | Acquisition Date ----- |
|---|--|------------------------------|
| MEDSYSTEMS HOLDINGS LLC | | |
| A manufacturer of enteral feeding products, such as feeding tubes and other products related to a | | |
| 13% Senior Subordinated Note due 2015 | \$ 620,676 | 08/29/08 |
| Preferred Unit (B) | 66 uts. | 08/29/08 |
| Common Unit Class A (B) | 671 uts. | 08/29/08 |
| Common Unit Class B (B) | 250 uts. | 08/29/08 |
| | | |
| MEGTEC HOLDINGS, INC. | | |
| A supplier of industrial and environmental products and services to a broad array of industries. | | |
| 12% Senior Subordinated Note due 2016 | \$ 1,144,068 | 09/24/08 |
| Preferred Stock (B) | 56 shs. | 09/24/08 |
| Limited Partnership Interest (B) | 0.74% int. | 09/16/08 |
| Warrant, exercisable until 2018, to purchase common stock at \$.01 per share (B) | 18 shs. | 09/24/08 |
| | | |
| MICROGROUP, INC. | | |
| A manufacturer of precision parts and assemblies, and a value-added supplier of metal tubing and | | |
| 12% Senior Subordinated Note due 2013 (D) | \$ 1,421,795 | * |
| Common Stock (B) | 238 shs. | * |
| Warrant, exercisable until 2013, to purchase common stock at \$.02 per share (B) | 87 shs. | * |
| | | |
| * 08/12/05 and 09/11/06. | | |
| | | |
| MILWAUKEE GEAR COMPANY | | |
| A manufacturer of high-precision custom gears and gear drives used by original equipment manufact | | |
| 13% Senior Subordinated Note due 2014 | \$ 1,246,154 | 07/21/08 |
| Preferred Stock (B) | 139 shs. | 07/21/08 |
| Common Stock (B) | 9 shs. | 07/21/08 |
| Warrant, exercisable until 2014, to purchase common stock at \$.01 per share (B) | 6 shs. | 07/21/08 |
| | | |
| MOMENTUM HOLDING CO. | | |
| A designer and supplier of upholstery fabric to commercial furniture manufacturers and architectu | | |
| Limited Partnership Interest (B) | 11.24% int. | 08/04/06 |
| Warrant, exercisable until 2014, to purchase common stock at \$.02 per share (B) | 586 shs. | 08/04/06 |

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| CORPORATE RESTRICTED SECURITIES: (A) (Continued) | Principal Amount Shares, Units or Ownership Percentage ----- | Acquisition Date ----- |
|---|--|------------------------------|
| MONESSEN HOLDING CORPORATION | | |
| A designer and manufacturer of a broad line of gas, wood, and electric hearth products and access | | |
| 14% Senior Subordinated Note due 2014 (D) | \$ 1,350,000 | 07/25/08 |
| 14% PIK Note due 2014 (D) | \$ 419,713 | 07/25/08 |
| Warrant, exercisable until 2014, to purchase common stock at \$.02 per share (B) | 81 shs. | 03/31/06 |
| | | |
| NABCO, INC. | | |
| A producer of explosive containment vessels in the United States. | | |
| 14% Senior Subordinated Note due 2014 (D) | \$ 330,882 | 02/24/06 |
| Limited Liability Company Unit (B) | 437 uts. | * |
| Warrant, exercisable until 2016, to purchase common stock at \$.01 per share (B) | 68 shs. | 02/24/06 |
| | | |
| * 02/24/06 and 06/22/07. | | |
| | | |
| NAVIS GLOBAL | | |
| A designer, manufacturer, seller and servicer of finishing machinery for the knit and woven segme | | |
| 10.75% Senior Secured Note due 2011 (D) | \$ 397,479 | 05/28/04 |
| 14% Senior Subordinated Note due 2014 (D) | \$ 780,219 | 05/28/04 |
| | | |
| NESCO HOLDINGS CORPORATION | | |
| A sales and leasing company that provides equipment to the electric utility, telecommunications, | | |
| 12% Senior Secured Subordinated Note due 2015 | \$ 1,125,000 | 08/02/07 |
| Common Stock (B) | 225,000 shs. | 08/02/07 |
| Warrant, exercisable until 2015, to purchase common stock at \$.01 per share (B) | 63,191 shs. | 08/02/07 |
| | | |
| NETSHAPE TECHNOLOGIES, INC. | | |
| A manufacturer of powder metal and metal injection molded precision components used in industrial | | |
| 12% Senior Subordinated Note due 2014 | \$ 810,000 | 02/02/07 |
| Limited Partnership Interest of Saw Mill PCG Partners LLC (B) | 1.38% int. | 02/01/07 |
| Limited Liability Company Unit Class D of Saw Mill PCG Partners LLC (B) | 8 uts. | * |
| Limited Liability Company Unit Class D-1 of Saw Mill PCG Partners LLC (B) | 65 uts. | 09/30/09 |
| Preferred Stock Class A (B) | 1 sh. | 12/18/08 |
| Preferred Stock Class A-1 (B) | 6 shs. | 09/30/09 |
| Warrant, exercisable until 2014, to purchase common stock at \$.01 per share (B) | 48 shs. | 02/02/07 |

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* 12/18/08 and 09/30/09.

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| CORPORATE RESTRICTED SECURITIES: (A) (Continued) | Principal Amount Shares, Units or Ownership Percentage ----- | Acquisition Date ----- |
|--|--|------------------------------|
| NORTHWEST MAILING SERVICES, INC. | | |
| A producer of promotional materials for companies that use direct mail as part of their customer | | |
| 12% Senior Subordinated Note due 2016 | \$ 1,492,105 | * |
| Limited Partnership Interest (B) | 1,724 uts. | * |
| Warrant, exercisable until 2019, to purchase common stock at \$.01 per share (B) | 2,605 shs. | * |
| * 07/09/09 and 08/09/10. | | |
| NYLONCRAFT, INC. | | |
| A supplier of engineered plastic components for the automotive industry. | | |
| 10% Senior Secured Note due 2012 | \$ 464,286 | 01/28/02 |
| 15% Senior Subordinated Note due 2012 (D) | \$ 285,714 | 01/28/02 |
| Convertible Preferred Stock A (B) | 571 shs. | 01/28/02 |
| Common Stock (B) | 178,571 shs. | 01/28/02 |
| Warrant, exercisable until 2012, to purchase common stock at \$.01 per share (B) | 138,928 shs. | 01/28/02 |
| O E C HOLDING CORPORATION | | |
| A provider of elevator maintenance, repair and modernization services. | | |
| 13% Senior Subordinated Note due 2017 | \$ 444,445 | 06/04/10 |
| Preferred Stock Series A (B) | 554 shs. | 06/04/10 |
| Preferred Stock Series B (B) | 311 shs. | 06/04/10 |
| Common Stock (B) | 344 shs. | 06/04/10 |
| OAKRIVER TECHNOLOGY, INC. | | |
| Designs, engineers and assembles high precision automated process equipment for the medical device defibrillators and stents. | | |
| 10% Senior Secured Note due 2012 | \$ 45,982 | 01/03/06 |
| 13% Senior Subordinated Note due 2013 | \$ 392,709 | 01/03/06 |
| Common Stock (B) | 184,176 shs. | 01/03/06 |
| Warrant, exercisable until 2013, to purchase common stock at \$.01 per share (B) | 43,073 shs. | 01/03/06 |
| OLYMPIC SALES, INC. | | |
| A boat retailer in Washington state, Oregon, California and British Columbia. | | |
| 12% Senior Subordinated Note due 2010 (D) | \$ 511,000 | 08/07/98 |
| 12% Senior Subordinated Note due 2010 (D) | \$ 244,154 | 02/09/00 |

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MassMutual Participation Investors

CONSOLIDATED SCHEDULE OF INVESTMENTS (CONTINUED)
September 30, 2010
(Unaudited)

| CORPORATE RESTRICTED SECURITIES: (A) (Continued) | Principal Amount Shares, Units or Ownership Percentage ----- | Acquisition Date ----- |
|--|--|------------------------------|
| ONTARIO DRIVE & GEAR LTD. | | |
| A manufacturer of all-wheel drive, off-road amphibious vehicles and related accessories. | | |
| Limited Liability Company Unit (B) | 1,942 uts. | 01/17/06 |
| Warrant, exercisable until 2013, to purchase common stock at \$.01 per share (B) | 328 shs. | 01/17/06 |
| P A S HOLDCO LLC | | |
| An independent provider of maintenance, repair and overhaul services to the aerospace gas turbine | | |
| 14% Senior Subordinated Note due 2014 | \$ 1,249,031 | 07/03/06 |
| Preferred Unit (B) | 202 uts. | 07/03/06 |
| Preferred Unit (B) | 36 uts. | 07/03/06 |
| Common Unit Class I (B) | 78 uts. | 07/03/06 |
| Common Unit Class L (B) | 17 uts. | 07/03/06 |
| P I I HOLDING CORPORATION | | |
| A manufacturer of plastic film and bags for the general industrial, medical, and food industries. | | |
| 12% Senior Subordinated Note due 2013 | \$ 1,215,000 | 03/31/06 |
| Preferred Stock (B) | 19 shs. | 03/31/06 |
| Common Stock (B) | 12 shs. | 03/31/06 |
| Warrant, exercisable until 2013, to purchase common stock at \$.01 per share (B) | 7 shs. | 03/31/06 |
| PACIFIC CONSOLIDATED HOLDINGS LLC | | |
| A manufacturer of rugged, mobile liquid and gaseous oxygen and nitrogen generating systems used in and medical sectors. | | |
| 14% Senior Subordinated Note due 2012 | \$ 719,041 | 04/27/07 |
| 5% Senior Subordinated Note due 2012 | \$ 42,187 | 07/21/10 |
| Preferred Shares Series E (B) | 42,187 shs. | 07/21/10 |
| Limited Liability Preferred Unit (B) | 928,962 uts. | 04/27/07 |
| PARADIGM PACKAGING, INC. | | |
| A manufacturer of plastic bottles and closures for the nutritional, pharmaceutical, personal care i | | |
| 12% Senior Subordinated Note due 2011 | \$ 1,125,000 | 12/19/00 |
| Membership Interests of MM/Lincap PPI Investments, Inc., LLC (B) | 1.28% int. | 12/21/00 |

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 CONSOLIDATED SCHEDULE OF INVESTMENTS (CONTINUED)
 September 30, 2010
 (Unaudited)

| CORPORATE RESTRICTED SECURITIES: (A) (Continued) | Principal Amount Shares, Units or Ownership Percentage ----- | Acquisition Date ----- |
|---|--|------------------------------|
| PEARLMAN ENTERPRISES, INC. | | |
| A developer and distributor of tools, equipment and supplies to the natural and engineered stone | | |
| Preferred Stock Series A (B) | 1,236 shs. | 05/22/09 |
| Preferred Stock Series B (B) | 7,059 shs. | 05/22/09 |
| Common Stock (B) | 21,462 shs. | 05/22/09 |
| | | |
| POSTLE ALUMINUM COMPANY LLC | | |
| A manufacturer and distributor of aluminum extruded products. | | |
| 15% Senior Subordinated Note due 2013 | \$ 817,979 | 06/03/10 |
| 3% Senior Subordinated PIK Note due 2014 (D) | \$ 1,209,017 | 10/02/06 |
| Limited Liability Company Unit Class A (B) | 733 uts. | 10/02/06 |
| Limited Liability Company Unit (B) | 76 uts. | 05/22/09 |
| Warrant, exercisable until 2016, to purchase common stock at \$.01 per share (B) | 4,550 shs. | 10/02/06 |
| | | |
| POWER SERVICES HOLDING COMPANY | | |
| A provider of industrial motor repair services, predictive and preventative maintenance, and performance serving the petrochemical, mining, power generation, metals, and paper industries. | | |
| 12% Senior Subordinated Note due 2016 | \$ 1,255,814 | 02/11/08 |
| Limited Partnership Interest (B) | 12.55% int. | 02/11/08 |
| Warrant, exercisable until 2016, to purchase common stock at \$.01 per share (B) | 700 shs. | 02/11/08 |
| | | |
| PRECISION WIRE HOLDING COMPANY | | |
| A manufacturer of specialty medical wires that are used in non-elective minimally invasive surgical | | |
| 14.25% Senior Subordinated Note due 2016 | \$ 1,368,089 | 11/12/09 |
| Warrant, exercisable until 2019, to purchase common stock at \$.01 per share (B) | 109 shs. | 11/12/09 |
| | | |
| QUALIS AUTOMOTIVE LLC | | |
| A distributor of aftermarket automotive brake and chassis products. | | |
| 13% Senior Subordinated Note due 2013 | \$ 922,612 | 05/28/04 |
| Common Stock (B) | 187,500 shs. | 05/28/04 |
| Warrant, exercisable until 2014, to purchase common stock at \$.01 per share (B) | 199,969 shs. | 05/28/04 |

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MassMutual Participation Investors

CONSOLIDATED SCHEDULE OF INVESTMENTS (CONTINUED)
September 30, 2010
(Unaudited)

| CORPORATE RESTRICTED SECURITIES: (A) (Continued) | Principal Amount Shares, Units or Ownership Percentage ----- | Acquisition Date ----- |
|--|--|------------------------------|
| R A J MANUFACTURING HOLDINGS LLC | | |
| A designer and manufacturer of women's swimwear sold under a variety of licensed brand names. | | |
| 14.5% Senior Subordinated Note due 2014 | \$ 1,384,011 | 12/15/06 |
| Limited Liability Company Unit (B) | 1,497 uts. | 12/15/06 |
| Warrant, exercisable until 2014, to purchase common stock at \$.01 per share (B) | 2 shs. | 12/15/06 |
| R E I DELAWARE HOLDING, INC. | | |
| An engineer and manufacturer of highly complex, close tolerance components, assemblies, tooling and equipment primarily for aerospace, medical and defense/radar markets. | | |
| 12% Senior Subordinated Note due 2016 | \$ 1,350,000 | 01/18/08 |
| Warrant, exercisable until 2018, to purchase common stock at \$.01 per share (B) | 3 shs. | 01/18/08 |
| ROYAL BATHS MANUFACTURING COMPANY | | |
| A manufacturer and distributor of acrylic and cultured marble bathroom products. | | |
| 12.5% Senior Subordinated Note due 2011 | \$ 562,500 | 11/14/03 |
| Warrant, exercisable until 2011, to purchase common stock at \$.01 per share (B) | 74 shs. | 11/14/03 |
| SAFETY SPEED CUT MANUFACTURING COMPANY, INC. | | |
| A manufacturer of vertical panel saws and routers for the woodworking industry. | | |
| Class B Common Stock (B) | 846 shs. | 06/02/99 |
| SAVAGE SPORTS HOLDING, INC. | | |
| A manufacturer of sporting firearms. | | |
| 12% Senior Subordinated Note due 2012 | \$ 814,655 | 09/10/04 |
| Preferred Stock Series A (B) | 35,038 shs. | 05/28/10 |
| Common Stock (B) | 324 shs. | * |
| Warrant, exercisable until 2012, to purchase common stock at \$.01 per share (B) | 71 shs. | 09/10/04 |
| * 09/10/04 and 10/05/07. | | |
| SENCORE HOLDING COMPANY | | |
| A designer, manufacturer, and marketer of decoders, receivers and modulators sold to broadcasters and operators for encoding/decoding analog and digital transmission video signals. | | |
| 12.5% Senior Subordinated Note due 2014 | \$ 934,615 | 01/15/09 |

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| | | |
|---|----------|----------|
| Common Stock (B) | 69 shs. | 01/15/09 |
| Warrant, exercisable until 2019, to purchase common stock at \$.01 per share (B) | 149 shs. | 01/15/09 |

CONSOLIDATED SCHEDULE OF INVESTMENTS (CONTINUED)
September 30, 2010
(Unaudited)

| | Principal Amount Shares, Units or Ownership Percentage ----- | Acquisition Date ----- |
|---|--|------------------------------|
| CORPORATE RESTRICTED SECURITIES: (A) (Continued) | | |
| SMART SOURCE HOLDINGS LLC | | |
| A short-term computer rental company. | | |
| 12% Senior Subordinated Note due 2015 | \$ 1,176,924 | * |
| Limited Liability Company Unit (B) | 328 uts. | * |
| Warrant, exercisable until 2015, to purchase common stock at \$.01 per share (B) | 83 shs. | * |
| * 08/31/07 and 03/06/08. | | |
| SPARTAN FOODS HOLDING COMPANY | | |
| A manufacturer of branded pizza crusts and pancakes. | | |
| 12.25% Senior Subordinated Note due 2017 | \$ 1,012,500 | 12/15/09 |
| Warrant, exercisable until 2018, to purchase common stock at \$.01 per share (B) | 136 shs. | 12/15/09 |
| SPECIALTY COMMODITIES, INC. | | |
| A distributor of specialty food ingredients. | | |
| 13.25% Senior Subordinated Note due 2016 | \$ 1,220,311 | 10/23/08 |
| Common Stock (B) | 15,882 shs. | 10/23/08 |
| Warrant, exercisable until 2018, to purchase common stock at \$.01 per share (B) | 5,852 shs. | 10/23/08 |
| STANTON CARPET HOLDING CO. | | |
| A designer and marketer of high and mid-priced decorative carpets and rugs. | | |
| 12.13% Senior Subordinated Note due 2014 | \$ 1,185,366 | 08/01/06 |
| Common Stock (B) | 165 shs. | 08/01/06 |
| Warrant, exercisable until 2014, to purchase common stock at \$.02 per share (B) | 55 shs. | 08/01/06 |
| SUNDANCE INVESTCO LLC | | |
| A provider of post-production services to producers of movies and television shows. | | |
| Limited Liability Company Unit Class A (B) | 3,405 shs. | 03/31/10 |
| SYNTERACT HOLDINGS CORPORATION | | |
| A provider of outsourced clinical trial management services to pharmaceutical and biotechnology c | | |

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| | | |
|---|--------------|----------|
| 14.5% Senior Subordinated Note due 2016 | \$ 1,381,270 | 09/02/08 |
| Redeemable Preferred Stock Series A (B) | 678 shs. | 09/02/08 |
| Warrant, exercisable until 2018, to purchase common stock at \$.01 per share (B) | 6,778 shs. | 09/02/08 |

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MassMutual Participation Investors

CONSOLIDATED SCHEDULE OF INVESTMENTS (CONTINUED)

September 30, 2010

(Unaudited)

| | Principal Amount Shares, Units or Ownership Percentage | Acquisition Date |
|--|---|---------------------|
| CORPORATE RESTRICTED SECURITIES: (A) (Continued) | ----- | ----- |

T H I ACQUISITION, INC.

A machine servicing company providing value-added steel services to long steel products.

| | | |
|---|--------------|----------|
| 12% Senior Subordinated Note due 2016 | \$ 1,350,000 | 01/14/08 |
| Warrant, exercisable until 2016, to purchase common stock at \$.01 per share (B) | 5 shs. | 01/14/08 |

TELECORPS HOLDINGS, INC.

A provider of equipment and services to producers of television shows and motion pictures.

| | | |
|---|--------------|----------|
| 12.75% Senior Subordinated Note due 2016 | \$ 1,681,677 | * |
| Common Stock (B) | 143 shs. | 09/02/09 |
| Warrant, exercisable until 2019, to purchase common stock at \$.01 per share (B) | 4,187 shs. | * |

* 05/20/09 and 09/02/09.

TERRA RENEWAL LLC

A provider of wastewater residual management and required environmental reporting, permitting, nu and record keeping to companies involved in poultry and food processing.

| | | |
|---|------------|----------|
| 12% Senior Subordinated Note due 2014 | \$ 664,062 | * |
| 6.79% Term Note due 2012 (C) | \$ 779,834 | * |
| 8.75% Term Note due 2012 (C) | \$ 830 | * |
| Limited Partnership Interest of Saw Mill Capital Fund V, LLC (B) | 2.27% int. | ** |
| Warrant, exercisable until 2016, to purchase common stock at \$.01 per share (B) | 41 shs. | 04/28/06 |

* 04/28/06 and 09/13/06. ** 03/01/05 and 10/10/08.

TORRENT GROUP HOLDINGS, INC.

A contractor specializing in the sales and installation of engineered drywells for the retention nuisance water flow.

| | | |
|---|--------------|----------|
| 14.5% Senior Subordinated Note due 2013 (D) | \$ 1,185,366 | 10/26/07 |
| Series B Preferred Stock (B) | 97 shs. | 03/31/10 |
| Common Stock (B) | 273 shs. | 03/31/10 |

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TOTAL E & S, INC.

A manufacturer of a wide variety of equipment used in the oil and gas industry.

| | | |
|---|------------|----------|
| 10.5% Senior Secured Term Note due 2013 | \$ 486,487 | 03/02/07 |
| 13% Senior Subordinated Note due 2014 (D) | \$ 341,971 | 03/02/07 |

CONSOLIDATED SCHEDULE OF INVESTMENTS (CONTINUED)
September 30, 2010
(Unaudited)

| | Principal Amount Shares, Units or Ownership Percentage ----- | Acquisition Date ----- |
|--|--|------------------------------|
| CORPORATE RESTRICTED SECURITIES: (A) (Continued) | | |
| TRANSPAC HOLDING COMPANY | | |
| A designer, importer, and wholesaler of home decor and seasonal gift products. | | |
| 14% Senior Subordinated Note due 2015 (D) | \$ 938,651 | 10/31/07 |
| Common Stock (B) | 110 shs. | 10/31/07 |
| Warrant, exercisable until 2015, to purchase common stock at \$.01 per share (B) | 50 shs. | 10/31/07 |
| TRANSTAR HOLDING COMPANY | | |
| A distributor of aftermarket automotive transmission parts. | | |
| 12% Senior Subordinated Note due 2014 | \$ 918,000 | 08/31/05 |
| Common Stock (B) | 571 shs. | * |
| Warrant, exercisable until 2013, to purchase common stock at \$.02 per share (B) | 46 shs. | 08/31/05 |
| * 08/31/05 and 04/30/07. | | |
| TRANZONIC COMPANIES (THE) | | |
| A producer of commercial and industrial supplies, such as safety products, janitorial supplies, w supplies and sanitary care products. | | |
| 13% Senior Subordinated Note due 2010 | \$ 1,356,000 | 02/05/98 |
| Common Stock (B) | 315 shs. | 02/04/98 |
| Warrant, exercisable until 2010, to purchase common stock at \$.01 per share (B) | 222 shs. | 02/05/98 |
| TRUCK BODIES & EQUIPMENT INTERNATIONAL | | |
| A designer and manufacturer of accessories for heavy and medium duty trucks, primarily dump bodie bodies, landscape bodies and other accessories. | | |
| 8% Senior Subordinated Note due 2011 (D) | \$ 1,222,698 | * |
| Preferred Stock Series B (B) | 128 shs. | 10/20/08 |
| Common Stock (B) | 393 shs. | * |
| Warrant, exercisable until 2013, to purchase common stock at \$.02 per share (B) | 81 shs. | * |
| Warrant, exercisable until 2018, to purchase common stock at \$.01 per share (B) | 558 shs. | 10/20/08 |

* 07/19/05 and 12/22/05.

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TRUSTILE DOORS, INC.

A manufacturer and distributor of interior doors.

Warrant, exercisable until 2013, to purchase

common stock at \$.01 per share (B)

3,060 shs.

04/11/03

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MassMutual Participation Investors

CONSOLIDATED SCHEDULE OF INVESTMENTS (CONTINUED)

September 30, 2010

(Unaudited)

| CORPORATE RESTRICTED SECURITIES: (A) (Continued) | Principal Amount Shares, Units or Ownership Percentage ----- | Acquisition Date ----- |
|---|--|------------------------------|
| U M A ENTERPRISES, INC. | | |
| An importer and wholesaler of home decor products. | | |
| 15% Senior Subordinated Note due 2015 | \$ 952,932 | 02/08/08 |
| Convertible Preferred Stock (B) | 470 shs. | 02/08/08 |
| U-LINE CORPORATION | | |
| A manufacturer of high-end, built-in, undercounter ice making, wine storage and refrigeration app | | |
| 14.5% Senior Subordinated Note due 2012 | \$ 996,500 | 04/30/04 |
| 14.5% PIK Note due 2012 | \$ 221,640 | 10/06/09 |
| Common Stock (B) | 96 shs. | 04/30/04 |
| Warrant, exercisable until 2012, to purchase common stock at \$.01 per share (B) | 122 shs. | 04/30/04 |
| VISIONEERING, INC. | | |
| A designer and manufacturer of tooling and fixtures for the aerospace industry. | | |
| 10.5% Senior Secured Term Loan due 2013 | \$ 458,824 | 05/17/07 |
| 13% Senior Subordinated Note due 2014 | \$ 370,588 | 05/17/07 |
| 18% PIK Convertible Preferred Stock (B) | 21,361 shs. | 03/13/09 |
| Common Stock (B) | 70,588 shs. | 05/17/07 |
| Warrant, exercisable until 2014, to purchase common stock at \$.01 per share (B) | 20,003 shs. | 05/17/07 |
| VITEX PACKAGING GROUP, INC. | | |
| A manufacturer of specialty packaging, primarily envelopes and tags used on tea bags. | | |
| 10% Senior Subordinated PIK Note due 2011 | \$ 89,626 | 10/29/09 |
| 5% Senior Subordinated PIK Note due 2011 (D) | \$ 450,000 | 06/30/07 |
| Class B Unit (B) | 406,525 uts. | 10/29/09 |
| Class C Unit (B) | 450,000 uts. | 10/29/09 |
| Limited Liability Company Unit Class A (B) | 383,011 uts. | * |
| Limited Liability Company Unit Class B (B) | 96,848 uts. | 07/19/04 |

* 07/19/04 and 10/29/09.

WELLBORN FOREST HOLDING CO.

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| | | |
|---|------------|----------|
| A manufacturer of semi-custom kitchen and bath cabinetry. | | |
| 14.13% Senior Subordinated Note due 2014 | \$ 911,250 | 11/30/06 |
| Common Stock (B) | 101 shs. | 11/30/06 |
| Warrant, exercisable until 2014, to purchase common stock at \$.01 per share (B) | 51 shs. | 11/30/06 |

MassMutual Participation Investors

CONSOLIDATED SCHEDULE OF INVESTMENTS (CONTINUED)
September 30, 2010
(Unaudited)

| CORPORATE RESTRICTED SECURITIES:(A) (Continued) | Principal Amount Shares, Units or Ownership Percentage ----- | Acquisition Date ----- |
|---|--|------------------------------|
| WHEATON HOLDING CORPORATION | | |
| A distributor and manufacturer of laboratory supply products and packaging. | | |
| 13% Senior Subordinated Note due 2017 | \$ 1,000,000 | 06/08/10 |
| Preferred Stock Series B (B) | 703 shs. | 06/08/10 |
| Common Stock (B) | 353 shs. | 06/08/10 |
| WORKPLACE MEDIA HOLDING CO. | | |
| A direct marketer specializing in providing advertisers with access to consumers in the workplace | | |
| 13% Senior Subordinated Note due 2015 (D) | \$ 613,692 | 05/14/07 |
| Limited Partnership Interest (B) | 12.26% int. | 05/14/07 |
| Warrant, exercisable until 2015, to purchase common stock at \$.02 per share (B) | 47 shs. | 05/14/07 |
| XALOY SUPERIOR HOLDINGS, INC. | | |
| A provider of melt processing components and ancillary equipment for both plastic injection molding | | |
| 15.5% Senior Subordinated Note due 2015 (D) | \$ 1,229,741 | 09/08/08 |
| Common Stock (B) | 150 shs. | 09/08/08 |
| TOTAL PRIVATE PLACEMENT INVESTMENTS (E) | | |

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MassMutual Participation Investors

CONSOLIDATED SCHEDULE OF INVESTMENTS (CONTINUED)
September 30, 2010
(Unaudited)

Shares or

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| CORPORATE RESTRICTED SECURITIES: (A) (Continued) | Interest Rate | Due Date | Principal Amount | Cost |
|--|------------------|-------------|---------------------|--------------|
| | ----- | ----- | ----- | ----- |
| RULE 144A SECURITIES - 2.90%: | | | | |
| BONDS - 2.90% | | | | |
| Appleton Papers, Inc. | 11.250% | 12/15/15 | \$ 252,000 | \$ 250,00 |
| ArcelorMittal | 6.125 | 06/01/18 | 500,000 | 519,17 |
| C C O Holdings LLC | 7.250 | 10/30/17 | 350,000 | 350,00 |
| Cenveo Corporation | 10.500 | 08/15/16 | 45,000 | 45,00 |
| Coffeyville Resources LLC | 9.000 | 04/01/15 | 70,000 | 69,65 |
| CompuCom Systems, Inc. | 12.500 | 10/01/15 | 670,000 | 653,06 |
| G F S I, Inc. (C) | 10.500 | 06/01/11 | 358,000 | 343,94 |
| Gannett Company, Inc. | 9.375 | 11/15/17 | 60,000 | 59,14 |
| International Lease Finance Corporation | 8.625 | 09/15/15 | 75,000 | 73,89 |
| Lyondell Chemical Co. | 8.000 | 11/01/17 | 100,000 | 100,00 |
| Magnachip Semiconductor | 10.500 | 04/15/18 | 95,000 | 95,24 |
| NBC Universal | 5.150 | 04/30/20 | 500,000 | 499,29 |
| Sinclair Television Group, Inc. | 9.250 | 11/01/17 | 200,000 | 194,97 |
| ViaSystems, Inc. | 12.000 | 01/15/15 | 100,000 | 96,79 |
| | | | | ----- |
| TOTAL BONDS | | | | 3,350,18 |
| | | | | ----- |
| CONVERTIBLE PREFERRED STOCK - 0.00% | | | | |
| ETEX Corporation (B) | | | 194 | 17 |
| | | | | ----- |
| TOTAL CONVERTIBLE PREFERRED STOCK | | | | 17 |
| | | | | ----- |
| PREFERRED STOCK - 0.00% | | | | |
| TherOX, Inc. (B) | | | 26 | 1,03 |
| | | | | ----- |
| TOTAL PREFERRED STOCK | | | | 1,03 |
| | | | | ----- |
| COMMON STOCK - 0.00% | | | | |
| Nortek, Inc. (B) | | | 100 | |
| Touchstone Health Partnership (B) | | | 292 | 1,06 |
| | | | | ----- |
| TOTAL COMMON STOCK | | | | 1,06 |
| | | | | ----- |
| TOTAL RULE 144A SECURITIES | | | | 3,352,46 |
| | | | | ----- |
| TOTAL CORPORATE RESTRICTED SECURITIES | | | | \$118,558,14 |
| | | | | ----- |

CONSOLIDATED SCHEDULE OF INVESTMENTS (CONTINUED)
September 30, 2010
(Unaudited)

| CORPORATE PUBLIC SECURITIES - 15.81%: (A) | Interest Rate | Due Date | Principal Amount | Cost |
|---|------------------|-------------|---------------------|----------|
| | ----- | ----- | ----- | ----- |
| BONDS - 15.35% | | | | |
| ACCO Brands Corporation | 10.625% | 03/15/15 | \$ 45,000 | \$ 44,43 |

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| | | | | |
|---|--------|----------|---------|--------|
| Affinia Group, Inc. | 9.000 | 11/30/14 | 25,000 | 24,25 |
| Allegheny Technologies, Inc. | 9.375 | 06/12/19 | 500,000 | 520,62 |
| Allied Waste NA | 7.125 | 05/15/16 | 500,000 | 506,19 |
| American General Finance Corporation | 6.500 | 09/15/17 | 250,000 | 215,00 |
| C R H America, Inc. | 5.300 | 10/15/13 | 500,000 | 418,43 |
| Centurytel, Inc. | 5.000 | 02/15/15 | 500,000 | 514,81 |
| Citigroup, Inc. | 5.500 | 04/11/13 | 500,000 | 437,89 |
| Cytec Industries, Inc. | 8.250 | 11/15/19 | 600,000 | 603,67 |
| Diversey, Inc. | 8.950 | 07/01/17 | 45,000 | 44,62 |
| Equifax, Inc. | 4.450 | 12/01/14 | 500,000 | 516,46 |
| Exide Corporation | 10.500 | 03/15/13 | 250,000 | 252,24 |
| GATX Corporation | 4.750 | 05/15/15 | 500,000 | 512,61 |
| Gencorp, Inc. | 9.500 | 08/15/13 | 130,000 | 130,00 |
| General Electric Capital Corporation | 5.500 | 01/08/20 | 500,000 | 498,05 |
| Goldman Sachs Group, Inc. | 4.750 | 07/15/13 | 500,000 | 418,64 |
| Goodyear Tire & Rubber Co. | 10.500 | 05/15/16 | 50,000 | 48,21 |
| Headwaters, Inc. | 11.375 | 11/01/14 | 45,000 | 44,58 |
| Intelsat Bermuda Ltd. | 9.250 | 06/15/16 | 690,000 | 713,57 |
| International Game Technology | 7.500 | 06/15/19 | 500,000 | 499,72 |
| International Lease Finance Corporation | 5.875 | 05/01/13 | 500,000 | 448,18 |
| Iron Mountain, Inc. | 8.750 | 07/15/18 | 500,000 | 512,06 |
| J.C. Penney Company, Inc. | 7.950 | 04/01/17 | 500,000 | 554,73 |
| Johnson Controls, Inc. | 5.500 | 01/15/16 | 500,000 | 398,12 |
| Kraft Foods, Inc. | 5.375 | 02/10/20 | 500,000 | 516,70 |
| Manitowoc Company, Inc. | 7.125 | 11/01/13 | 100,000 | 100,00 |
| Markwest Energy Operating Co. | 6.875 | 11/01/14 | 35,000 | 27,78 |
| Masco Corporation | 7.125 | 03/15/20 | 350,000 | 349,99 |
| Morgan Stanley | 5.500 | 01/26/20 | 500,000 | 497,30 |
| Nortek, Inc. | 11.000 | 12/01/13 | 100,444 | 98,95 |
| Owens Corning, Inc. | 9.000 | 06/15/19 | 30,000 | 29,51 |
| Pride International, Inc. | 6.875 | 08/15/20 | 30,000 | 30,00 |
| Qwest Diagnostic, Inc. | 4.750 | 01/30/20 | 500,000 | 498,66 |
| Rental Service Corporation | 9.500 | 12/01/14 | 175,000 | 175,61 |
| Sealed Air Corporation | 7.875 | 06/15/17 | 500,000 | 492,89 |
| Sheridan Acquisition Corporation | 10.250 | 08/15/11 | 225,000 | 222,00 |
| Sprint Capital Corporation | 6.900 | 05/01/19 | 440,000 | 405,22 |
| Teck Resources Ltd. | 10.750 | 05/15/19 | 30,000 | 28,60 |

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MassMutual Participation Investors

CONSOLIDATED SCHEDULE OF INVESTMENTS (CONTINUED)

September 30, 2010

(Unaudited)

| CORPORATE PUBLIC SECURITIES: (A) (Continued) | Interest Rate | Due Date | Shares or Principal Amount | Cost |
|--|---------------|----------|----------------------------|-----------|
| The Valspar Corporation | 7.250% | 06/15/19 | \$ 500,000 | \$ 501,38 |
| Ticketmaster Entertainment, Inc. | 10.750 | 07/28/16 | 250,000 | 250,00 |
| Time Warner Cable, Inc. | 5.000 | 02/01/20 | 500,000 | 489,79 |
| Titan International, Inc. | 8.000 | 01/15/12 | 70,000 | 70,00 |
| Tube City IMS Corporation | 9.750 | 02/01/15 | 1,000,000 | 988,79 |
| Tyco International Group SA | 8.500 | 01/15/19 | 500,000 | 457,49 |
| Tyco International Group SA | 6.550 | 10/01/17 | 125,000 | 124,99 |
| United Components, Inc. | 9.375 | 06/15/13 | 535,000 | 535,08 |
| Verso Paper Holdings LLC | 9.125 | 08/01/14 | 500,000 | 486,87 |
| W P P Finance Corporation | 5.875 | 06/15/14 | 500,000 | 507,22 |

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| | | |
|-----------------------------------|---------|-----------------------------|
| TOTAL BONDS | | ----- 16,762,07 ----- |
| COMMON STOCK - 0.46% | | |
| CKX, Inc. (B) | | 52,500 422,62 |
| Directed Electronics, Inc. (B) | | 195,118 982,86 |
| Intrepid Potash, Inc. (B) | | 185 5,92 |
| ITC^DeltaCom, Inc. (B) | | 94,588 827,64 |
| Rue21, Inc. (B) | | 350 6,65 |
| | | ----- |
| TOTAL COMMON STOCK | | 2,245,70 ----- |
| TOTAL CORPORATE PUBLIC SECURITIES | | \$ 19,007,78 ----- |
| TOTAL INVESTMENTS | 104.37% | \$137,565,92 ===== |
| Other Assets | 6.44 | |
| Liabilities | (10.81) | |
| | ----- | |
| TOTAL NET ASSETS | 100.00% | ===== |

- (A) In each of the convertible note, warrant, convertible preferred and common stock investments, agreed to provide certain registration rights.
- (B) Non-income producing security.
- (C) Variable rate security; rate indicated is as of 09/30/10.
- (D) Defaulted security; interest not accrued.
- (E) Illiquid security. As of September 30, 2010, the value of these securities amounted to \$103,185.66% of net assets.
- PIK - Payment-in-kind

CONSOLIDATED SCHEDULE OF INVESTMENTS (CONTINUED)
September 30, 2010
(Unaudited)

| INDUSTRY CLASSIFICATION: | Fair Value/ Market Value ----- | |
|----------------------------|--------------------------------------|----------------------------|
| AEROSPACE - 4.40% | | BUILDINGS & REAL ESTATE - |
| A E Company, Inc. | \$ 1,846,976 | K W P I Holdings Corporati |
| Gencorp, Inc. | 132,275 | Masco Corporation |
| P A S Holdco LLC | 2,499,798 | Owens Corning, Inc. |
| Visioneering, Inc. | 821,479 | TruStile Doors, Inc. |
| | ----- | |
| | 5,300,528 | |
| | ----- | |
| AUTOMOBILE - 5.14% | | CHEMICAL, PLASTICS & RUBBE |
| Exide Corporation | 255,625 | Capital Specialty Plastics |
| Goodyear Tire & Rubber Co. | 56,625 | |
| Jason, Inc. | 25,509 | |
| Johnson Controls, Inc. | 566,589 | CONSUMER PRODUCTS - 9.88% |
| Nyloncraft, Inc. | 967,240 | Aero Holdings, Inc. |
| Ontario Drive & Gear Ltd. | 420,038 | Bravo Sports Holding Corpo |
| Qualis Automotive LLC | 1,452,629 | Custom Engineered Wheels, |

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| | |
|--------------------------------------|-----------|
| Titan International, Inc. | 75,250 |
| Transtar Holding Company | 1,823,498 |
| United Components, Inc. | 544,364 |
| | ----- |
| | 6,187,367 |
| | ----- |
| BEVERAGE, DRUG & FOOD - 6.09% | |
| Eatem Holding Company | 1,023,022 |
| F F C Holding Corporation | 990,096 |
| Golden County Foods Holding, Inc. | 1,207,177 |
| Hospitality Mints Holding Company | 1,119,209 |
| Kraft Foods, Inc. | 556,576 |
| L H D Europe Holding, Inc. | 12,825 |
| Spartan Foods Holding Company | 1,022,078 |
| Specialty Commodities, Inc. | 1,399,428 |
| | ----- |
| | 7,330,411 |
| | ----- |
| BROADCASTING & ENTERTAINMENT - 2.39% | |
| C C O Holdings LLC | 354,813 |
| CKX, Inc. | 257,250 |
| NBC Universal | 536,407 |
| Sinclair Television Group, Inc. | 214,500 |
| Time Warner Cable, Inc. | 535,463 |
| WPP Finance Corporation | 554,010 |
| Workplace Media Holding Co. | 429,584 |
| | ----- |
| | 2,882,027 |
| | ----- |

G F S I, Inc.
 Johnson Diversey, Inc.
 K N B Holdings Corporation
 Manhattan Beachwear Holding
 Momentum Holding Co.
 R A J Manufacturing Holding
 Royal Baths Manufacturing
 The Tranzonic Companies

CONTAINERS, PACKAGING & GL
 Flutes, Inc.
 Maverick Acquisition Compa
 P I I Holding Corporation
 Paradigm Packaging, Inc.
 Sealed Air Corporation
 Vitex Packaging Group, Inc

DISTRIBUTION - 1.81%
 Duncan Systems, Inc.
 F C X Holdings Corporation

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MassMutual Participation Investors

CONSOLIDATED SCHEDULE OF INVESTMENTS (CONTINUED)
 September 30, 2010
 (Unaudited)

| INDUSTRY CLASSIFICATION: | Fair Value/ Market Value |
|--|-----------------------------|
| | ----- |
| DIVERSIFIED/CONGLOMERATE, MANUFACTURING - 9.33% | |
| A H C Holdings Company, Inc. | \$ 1,567,332 |
| Arrow Tru-Line Holdings, Inc. | 853,187 |
| C D N T, Inc. | 784,045 |
| Headwaters, Inc. | 47,925 |
| K P I Holdings, Inc. | 1,059,456 |
| MEGTEC Holdings, Inc. | 1,129,821 |
| Milwaukee Gear Company | 1,121,539 |
| Nortek, Inc. | 110,627 |
| O E C Holding Corporation | 506,546 |
| Postle Aluminum Company LLC | 1,968,356 |
| Truck Bodies & Equipment International | 1,100,428 |
| Xaloy Superior Holdings, Inc. | 983,793 |
| | ----- |
| | 11,233,055 |
| | ----- |
| DIVERSIFIED/CONGLOMERATE, SERVICE - 12.94% | |

ELECTRONICS - 1.09%
 Barcodes Group, Inc.
 Connecticut Electric, Inc.
 Directed Electronics, Inc.

FINANCIAL SERVICES - 2.86%
 American General Finance C
 Citigroup, Inc.
 GATX Corporation
 General Electric Capital C
 Goldman Sachs Group, Inc.
 Highgate Capital LLC
 International Lease Financ
 Morgan Stanley

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| | | |
|-----------------------------------|------------|----------------------------|
| A S C Group, Inc. | 1,380,701 | |
| A W X Holdings Corporation | 315,000 | HEALTHCARE, EDUCATION & CH |
| ACCO Brands Corporation | 50,288 | American Hospice Managemen |
| Advanced Technologies Holdings | 1,456,151 | F H S Holdings LLC |
| Affinia Group, Inc. | 25,750 | Qwest Diagnostic, Inc. |
| Apex Analytix Holding Corporation | 1,401,005 | Syneract Holdings Corpora |
| Associated Diversified Services | 694,419 | Touchstone Health Partners |
| C R H America, Inc. | 536,692 | Wheaton Holdings Corporati |
| Clough, Harbour and Associates | 1,441,508 | |
| Crane Rental Corporation | 1,212,223 | |
| Diversco, Inc./DHI Holdings, Inc. | 236,518 | |
| Dwyer Group, Inc. | 830,058 | HOME & OFFICE FURNISHINGS, |
| Equifax, Inc. | 532,611 | & DURABLE CONSUMER PRODUCT |
| Insurance Claims Management, Inc. | 181,594 | Connor Sport Court Interna |
| Iron Mountain, Inc. | 530,625 | H M Holding Company |
| Mail Communications Group, Inc. | 710,209 | Home Decor Holding Company |
| Nesco Holdings Corporation | 1,577,069 | Justrite Manufacturing Acq |
| Northwest Mailing Services, Inc. | 1,726,849 | K H O F Holdings, Inc. |
| Pearlman Enterprises, Inc. | -- | Monessen Holding Corporati |
| Tyco International Group | 751,004 | Stanton Carpet Holding Co. |
| | ----- | Transpac Holdings Company |
| | 15,590,274 | U M A Enterprises, Inc. |
| | ----- | U-Line Corporation |
| | | Wellborn Forest Holding Co |

CONSOLIDATED SCHEDULE OF INVESTMENTS (CONTINUED)

September 30, 2010

(Unaudited)

| INDUSTRY CLASSIFICATION: | Fair Value/ Market Value | |
|--|-----------------------------|----------------------------|
| | ----- | |
| LEISURE, AMUSEMENT, ENTERTAINMENT - 1.86% | | NATURAL RESOURCES - 2.29% |
| International Game Technology | \$ 594,210 | Appleton Papers, Inc. |
| Savage Sports Holding, Inc. | 1,381,713 | ArcelorMittal |
| Ticketmaster Entertainment, Inc. | 273,750 | Genveo Corporation |
| | ----- | Cytec Industries, Inc. |
| | 2,249,673 | Intrepid Potash, Inc. |
| | ----- | Lyondell Chemical Co. |
| MACHINERY - 7.26% | | The Valspar Corporation |
| A S A P Industries LLC | 677,667 | Verso Paper Holdings LLC |
| Davis-Standard LLC | 1,418,726 | |
| E S P Holdco, Inc. | 1,284,220 | |
| M V I Holding, Inc. | 634,794 | OIL & GAS - 2.60% |
| Manitowoc Company, Inc. | 99,750 | Coffeyville Resources LLC |
| Navis Global | 572,660 | International Offshore Ser |
| NetShape Technologies, Inc. | 567,000 | MBWS Ultimate Holdco, Inc. |
| Pacific Consolidated Holdings LLC | 711,314 | Pride International, Inc. |
| Power Services Holding Company | 1,254,854 | Total E & S, Inc. |
| R E I Delaware Holding, Inc. | 1,363,095 | |
| Safety Speed Cut Manufacturing Company, Inc. | 164,253 | |
| | ----- | |
| | 8,748,333 | PHARMACEUTICALS - 1.23% |
| | ----- | |

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| | | |
|---|-----------|-----------------------------|
| MEDICAL DEVICES/BIOTECH - 3.88% | | CorePharma LLC |
| Coeur, Inc. | 707,298 | |
| E X C Acquisition Corporation | 40,585 | PUBLISHING/PRINTING - 0.24% |
| ETEX Corporation | -- | Gannett Company, Inc. |
| MedSystems Holdings LLC | 702,780 | Sheridan Acquisition Corpo |
| MicroGroup, Inc. | 1,208,526 | |
| OakRiver Technology, Inc. | 608,874 | |
| Precision Wire Holding Company | 1,405,947 | |
| TherOX, Inc. | -- | RETAIL STORES - 0.72% |
| | ----- | J. C. Penney Company, Inc. |
| | 4,674,010 | Olympic Sales, Inc. |
| | ----- | Rental Service Corporation |
| MINING, STEEL, IRON & NON-PRECIOUS METALS - 2.28% | | Rue21, Inc. |
| Allegheny Technology, Inc. | 604,286 | |
| T H I Acquisition, Inc. | 1,080,000 | TECHNOLOGY - 2.62% |
| Teck Resources, Ltd. | 37,779 | Compucom Systems, Inc. |
| Tube City IMS Corporation | 1,020,000 | Magnachip Semiconductor |
| | ----- | Sencore Holding Company |
| | 2,742,065 | Smart Source Holdings LLC |
| | ----- | ViaSystems, Inc. |

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MassMutual Participation Investors

CONSOLIDATED SCHEDULE OF INVESTMENTS (CONTINUED)
September 30, 2010
(Unaudited)

| INDUSTRY CLASSIFICATION: | Fair Value/ Market Value |
|--------------------------------------|-----------------------------|
| | ----- |
| TELECOMMUNICATIONS - 3.29% | |
| All Current Holding Company | \$ 703,205 |
| Centurytel, Inc. | 518,649 |
| Intelsat Bermuda Ltd. | 733,125 |
| ITC^DeltaCom, Inc. | 130,531 |
| Spirit Capital Corporation | 442,200 |
| Sundance Investco LLC | -- |
| Telecorps Holdings, Inc. | 1,429,425 |
| | ----- |
| | 3,957,135 |
| | ----- |
| TRANSPORTATION - 0.0% | |
| NABCO, Inc. | -- |
| | ----- |
| UTILITIES - .03% | |
| Markwest Energy Operating Co. | 35,394 |
| | ----- |
| WASTE MANAGEMENT / POLLUTION - 1.50% | |
| Allied Waste NA | 535,625 |
| Terra Renewal LLC | 1,273,352 |
| Torrent Group Holdings, Inc. | -- |
| | 1,808,977 |
| | ----- |

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TOTAL INVESTMENTS - 104.37%

\$ 125,717,780

=====

See Notes to Consolidated Financial Statements

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

1. HISTORY

MassMutual Participation Investors (the "Trust") was organized as a Massachusetts business trust under the laws of the Commonwealth of Massachusetts pursuant to a Declaration of Trust dated April 7, 1988.

The Trust is a diversified closed-end management investment company. Babson Capital Management LLC ("Babson Capital"), a wholly-owned indirect subsidiary of Massachusetts Mutual Life Insurance Company ("MassMutual"), acts as its investment adviser. The Trust's investment objective is to maximize total return by providing a high level of current income, the potential for growth of income, and capital appreciation. The Trust's principal investments are privately placed, below-investment grade, long-term debt obligations purchased directly from their issuers, which tend to be smaller companies. At least half of these investments normally include equity features such as common stock, warrants, conversion rights, or other equity features that provide the Trust with the opportunity to realize capital gains. The Trust will also invest in publicly traded debt securities (including high yield securities), again with an emphasis on those with equity features, and in convertible preferred stocks and, subject to certain limitations, readily marketable equity securities. Below-investment grade or high yield securities have predominantly speculative characteristics with respect to the capacity of the issuer to pay interest and repay capital. In addition, the Trust may temporarily invest in high quality, readily marketable securities.

On January 27, 1998, the Board of Trustees authorized the formation of a wholly-owned subsidiary of the Trust ("MMPI Subsidiary Trust") for the purpose of holding certain investments. The results of the MMPI Subsidiary Trust are consolidated in the accompanying financial statements. Footnote 2.D below discusses the federal tax consequences of the MMPI Subsidiary Trust.

2. SIGNIFICANT ACCOUNTING POLICIES

The following is a summary of significant accounting policies followed consistently by the Trust in the preparation of its consolidated financial statements in conformity with accounting principles generally accepted in the United States of America.

A. VALUATION OF INVESTMENTS:

Valuation of a security in the Trust's portfolio is made on the basis of the market price whenever market quotations are readily available and all

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securities of the same class held by the Trust can be readily sold in such market.

Nearly all securities which are acquired by the Trust directly from the issuers and shares into which such securities may be converted or which may be purchased on the exercise of warrants attached to such securities will be subject to legal or contractual delays in, or restrictions on, resale and will therefore be "restricted securities." Generally speaking, as contrasted with open-market sales of unrestricted securities, which may be effected immediately if the market is adequate, restricted securities can be sold only in a public offering for which a registration statement is in effect under the Securities Act of 1933, as amended (the "1933 Act") or pursuant to a transaction that is exempt from registration under the 1933 Act. The value of restricted securities, and of any other assets for which there are no reliable market quotations, is the fair value as determined in good faith by the Trust's Board of Trustees (the "Trustees"). Each restricted security is valued by the Trustees at the time of its acquisition and at least quarterly thereafter. The Trustees have established guidelines to aid in the valuation of each security. Generally, restricted securities are initially valued at cost or less at the time of acquisition by the Trust. Values greater or less than cost are used thereafter for restricted securities in appropriate circumstances. Among the factors ordinarily considered are the existence of restrictions upon the sale of a security held by the Trust; an estimate of the existence and the extent of a market for the security; the extent of any discount at which the security was acquired; the estimated period of time during which the security will not be freely marketable; the estimated expenses of registering or otherwise qualifying the security for public sale; estimated underwriting commissions if underwriting would be required to effect a sale; in the case of a convertible security, whether or not it would trade on the basis of its stock equivalent; in the case of a debt obligation which would trade independently of any equity equivalent, the current yields on comparable securities; the estimated amount of the floating supply of such securities available for purchase; the proportion of the issue held by the Trust; changes in the financial condition and prospects of the issuer; the existence of merger proposals or tender offers affecting the issuer; and any other factors affecting fair value, all in accordance with the Investment Company Act of 1940, as amended (the "1940 Act"). In making valuations, opinions of counsel may be relied upon as to whether or not securities are restricted securities and as to the legal requirements for public sale.

When market quotations are readily available for unrestricted securities of an issuer, restricted securities of the same class are generally valued at a discount from the market price of such unrestricted securities. The Trustees, however, consider all factors in fixing any discount, including the filing of a registration statement for such securities under the 1933 Act and any other developments which are likely to increase the probability that the securities may be publicly sold by the Trust without restriction.

The Trustees meet at least once each quarter to approve the value of the Trust's portfolio securities as of the close of business on the last business day of the preceding quarter. This valuation requires the approval of a majority of the Trustees of the Trust, including a majority of the Trustees who are not interested persons of the Trust or of Babson Capital. In making valuations,

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS MassMutual Participation Investors
(UNAUDITED)

the Trustees will consider reports by Babson Capital analyzing each portfolio security in accordance with the relevant factors referred to above. Babson

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Capital has agreed to provide such reports to the Trust at least quarterly.

The consolidated financial statements include private placement restricted securities valued at \$103,182,218 (85.66% of net assets) as of September 30, 2010 whose values have been estimated by the Trustees in the absence of readily ascertainable market values. Due to the inherent uncertainty of valuation, those estimated values may differ significantly from the values that would have been used had a ready market for the securities existed, and the differences could be material.

The values for Rule 144A restricted securities and corporate public securities are stated at the last reported sales price or at prices based upon quotations obtained from brokers and dealers as of September 30, 2010, subject to discount where appropriate, and are approved by the Trustees.

Short-term securities with more than sixty days to maturity are valued at fair value and short-term securities having a maturity of sixty days or less are valued at amortized cost, which approximates market value.

In accordance with the authoritative guidance on fair value measurements and disclosures under accounting principles generally accepted in the United States of America ("U.S. GAAP"), the Trust discloses the fair value of its investments in a hierarchy that prioritizes the inputs to valuation techniques used to measure the fair value. The hierarchy gives the highest priority to valuations based upon unadjusted quoted prices in active markets for identical assets or liabilities (level 1 measurement) and the lowest priority to valuations based upon unobservable inputs that are significant to the valuation (level 3 measurements). The guidance establishes three levels of the fair value hierarchy as follows:

Level 1: quoted prices in active markets for identical securities

Level 2: other significant observable inputs (including quoted prices for similar securities, interest rates, prepayment speeds, credit risk, etc.)

Level 3: significant unobservable inputs (including the Trust's own assumptions in determining the fair value of investments)

The inputs and methodology used for valuing securities are not necessarily an indication of the risk associated with investing in those securities.

The following is a summary of the inputs used to value the Trust's net assets as of September 30, 2010:

| ASSETS: | TOTAL | LEVEL 1 | LEVEL 2 | LEVEL 3 |
|-----------------------|---------------|-----------|--------------|---------------|
| <hr/> | | | | |
| Restricted Securities | | | | |
| Corporate Bonds | \$90,563,786 | \$ -- | \$3,495,552 | \$87,068,234 |
| Common Stock - U.S. | 8,377,394 | -- | 3,905 | 8,373,489 |
| Preferred Stock | 3,546,788 | -- | -- | 3,546,788 |
| Partnerships and LLCs | 4,193,707 | -- | -- | 4,193,707 |
| Public Securities | | | | |
| Corporate Bonds | 18,488,128 | -- | 18,488,128 | -- |
| Common Stock - U.S. | 547,977 | 547,977 | -- | -- |
| Preferred Stock | -- | -- | -- | -- |
| Short-term Securities | -- | -- | -- | -- |
| <hr/> | | | | |
| TOTAL | \$125,717,780 | \$547,977 | \$21,987,585 | \$103,182,218 |

Following is a reconciliation of Level 3 assets for which significant

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unobservable inputs were used to determine fair value:

| ASSETS: | BEGINNING BALANCE AT 12/31/2009 | TOTAL GAINS OR LOSSES (REALIZED/ UNREALIZED) | PURCHASES, SALES, ISSUANCES & SETTLEMENTS (NET) | TRANSFERS IN AND/OR OUT OF LEVEL 3 | BA 09 |
|-----------------------|---------------------------------------|---|--|--|----------|
| ----- | | | | | |
| Restricted Securities | | | | | |
| Corporate Bonds | \$81,465,949 | \$3,337,086 | \$2,265,199 | \$ -- | \$8 |
| Common Stock - U.S. | 7,767,378 | 1,138,392 | (532,281) | | |
| Preferred Stock | 3,468,130 | 1,319,134 | (1,240,476) | | |
| Partnerships and LLCs | 3,536,247 | 1,472,509 | (815,049) | | |
| ----- | | | | | |
| | \$96,237,704 | \$7,267,121 | \$ (322,607) | \$ -- | \$10 |
| ===== | | | | | |

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED) (UNAUDITED)

B. ACCOUNTING FOR INVESTMENTS:

Investment transactions are accounted for on the trade date. Dividend income is recorded on the ex-dividend date. Interest income is recorded on the accrual basis, including the amortization of premiums and accretion of discounts on bonds held using the yield-to-maturity method. The Trust does not accrue income when payment is delinquent and when management believes payment is questionable.

Realized gains and losses on investment transactions and unrealized appreciation and depreciation of investments are reported for financial statement and Federal income tax purposes on the identified cost method.

C. USE OF ESTIMATES:

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

D. FEDERAL INCOME TAXES:

The Trust has elected to be taxed as a "regulated investment company" under the Internal Revenue Code, and intends to maintain this qualification and to distribute substantially all of its net taxable income to its shareholders. In any year when net long-term capital gains are realized by the Trust, management, after evaluating the prevailing economic conditions, will recommend that Trustees either designate the net realized long-term gains as undistributed and pay the federal capital gains taxes thereon, or distribute all or a portion of such net gains.

The Trust is taxed as a regulated investment company and is therefore limited as to the amount of non-qualified income that it may receive as the result of operating a trade or business, e.g. the Trust's pro rata share of income allocable to the Trust by a partnership operating company. The Trust's violation of this limitation could result in the loss of its status as a regulated investment company, thereby subjecting all of its net income and

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capital gains to corporate taxes prior to distribution to its shareholders. The Trust, from time-to-time, identifies investment opportunities in the securities of entities that could cause such trade or business income to be allocable to the Trust. The MMPI Subsidiary Trust (described in Footnote 1 above) was formed in order to allow investment in such securities without adversely affecting the Trust's status as a regulated investment company.

The MMPI Subsidiary Trust is not taxed as a regulated investment company. Accordingly, prior to the Trust receiving any distributions from the MMPI Subsidiary Trust, all of the MMPI Subsidiary Trust's taxable income and realized gains, including non-qualified income and realized gains, is subject to taxation at prevailing corporate tax rates. As of September 30, 2010, the MMPI Subsidiary Trust has a deferred tax liability of \$333,717.

Beginning with the 2009 annual financial statements, the Trust recognizes a tax benefit from an uncertain position only if it is more likely than not that the position is sustainable, based solely on its technical merits and consideration of the relevant taxing authority's widely understood administrative practices and precedents. If this threshold is met, the Trust measures the tax benefit as the largest amount of benefit that is greater than fifty percent likely of being realized upon ultimate settlement. The Trust has evaluated and determined that the tax positions did not have a material effect on the Trust's financial position and results of operations for the nine months ended September 30, 2010.

E. DISTRIBUTIONS TO SHAREHOLDERS:

The Trust records distributions to shareholders from net investment income and net realized gains, if any, on the exdividend date. The Trust's net investment income dividend is declared four times per year, in April, July, October, and December. The Trust's net realized capital gain distribution, if any, is declared in December.

F. EXPENSE REDUCTION:

Citibank, N.A. ("Citibank") serves as custodian to the Trust. Pursuant to the custodian agreement, Citibank receives a fee reduced by credits on cash balances the Trust maintains with Citibank. All credit balances, if any, used to reduce the Trust's custodian fees are reported as fees paid indirectly on the Statement of Operations. For the nine months ended September 30, 2010, there were no credit balances used to reduce custodian fees.

3. INVESTMENT ADVISORY AND ADMINISTRATIVE SERVICES CONTRACT

A. SERVICES:

Under an Investment Advisory and Administrative Services Contract (the "Contract") with the Trust, Babson Capital has agreed to use its best efforts to present to the Trust a continuing and suitable investment program consistent with the investment objectives and policies of the Trust. Babson Capital represents the Trust in any negotiations with issuers, investment banking firms, securities brokers or dealers and other institutions or investors relating to the Trust's investments. Under the Contract, Babson Capital also provides administration of the day-to-day operations of the Trust and provides the Trust with office space and office equipment, accounting and bookkeeping services, and necessary executive, clerical and secretarial personnel for the performance of the foregoing services.

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS MassMutual Participation Investors
(CONTINUED)
(UNAUDITED)

B. FEE:

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For its services under the Contract, Babson Capital is paid a quarterly investment advisory fee equal to 0.225% of the value of the Trust's net assets as of the last business day of each fiscal quarter, an amount approximately equivalent to 0.90% on an annual basis. A majority of the Trustees, including a majority of the Trustees who are not interested persons of the Trust or of Babson Capital, approve the valuation of the Trust's net assets as of such day.

4. SENIOR SECURED INDEBTEDNESS

MassMutual holds the Trust's \$12,000,000 Senior Fixed Rate Convertible Note (the "Note") issued by the Trust in 1995. The Note, as amended, is due December 13, 2011 and accrues interest at 5.80% per annum. MassMutual, at its option, can convert the principal amount of the Note into common shares. The dollar amount of principal would be converted into an equivalent dollar amount of common shares based upon the average price of the common shares for ten business days prior to the notice of conversion. For the nine months ended September 30, 2010, the Trust incurred total interest expense on the Note of \$522,000.

The Trust may redeem the Note, in whole or in part, at the principal amount proposed to be redeemed together with the accrued and unpaid interest thereon through the redemption date plus a Make Whole Premium. The Make Whole Premium equals the excess of (i) the present value of the scheduled payments of principal and interest which the Trust would have paid but for the proposed redemption, discounted at the rate of interest of U.S. Treasury obligations whose maturity approximates that of the Note plus 0.50% over (ii) the principal of the Note proposed to be redeemed.

5. PURCHASES AND SALES OF INVESTMENTS

FOR THE NINE
MONTHS ENDED
09/30/2010

| | COST OF INVESTMENTS ACQUIRED ----- | PROCEEDS FROM SALES OR MATURITIES ----- |
|---------------------------------|---|---|
| Corporate restricted securities | \$13,486,125 | \$13,634,177 |
| Corporate public securities | 7,019,906 | 2,012,731 |

The aggregate cost of investments is substantially the same for financial reporting and Federal income tax purposes as of September 30, 2010. The net unrealized depreciation of investments for financial reporting and Federal tax purposes as of September 30, 2010 is \$11,848,145 and consists of \$12,106,802 appreciation and \$23,954,947 depreciation.

6. QUARTERLY RESULTS OF INVESTMENT OPERATIONS

| | MARCH 31, 2010 | |
|---|-----------------|--------------------|
| | AMOUNT ----- | PER SHARE ----- |
| Investment income | \$2,911,112 | |
| Net investment income | 2,361,286 | \$ 0.24 |
| Net realized and unrealized gain on investments (net of taxes) | 142,746 | 0.01 |
| | JUNE 30, 2010 | |
| | AMOUNT | PER SHARE |

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| | ----- | ----- |
|---|-------------------|-----------|
| Investment income | \$3,007,150 | |
| Net investment income | 2,444,394 | \$ 0.24 |
| Net realized and unrealized gain on investments (net of taxes) | 3,134,736 | 0.32 |
| | SEPTMBER 30, 2010 | |
| | AMOUNT | PER SHARE |
| | ----- | ----- |
| Investment income | \$3,102,390 | |
| Net investment income | 2,512,502 | \$ 0.25 |
| Net realized and unrealized gain on investments (net of taxes) | 5,301,577 | 0.53 |

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MassMutual Participation Investors

MEMBERS OF THE BOARD OF TRUSTEES

Donald Glickman

Robert E. Joyal

William J. Barrett

Michael H. Brown*

Donald E. Benson*

Dr. Corine T. Norgaard*

Clifford M. Noreen

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Martin T. Hart

Maleyne M. Syracuse

*Member of the Audit Committee

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Vice President

Richard E. Spencer, II
Vice President

Daniel J. Florence
Treasurer

John T. Davitt, Jr.
Comptroller

Melissa M. LaGrant
Chief Compliance Officer

DIVIDEND REINVESTMENT AND CASH PURCHASE PLAN

MassMutual Participation Investors offers a Dividend Reinvestment and Cash Purchase Plan (the "Plan"). The Plan provides a simple and automatic way for shareholders to add to their holdings in the Trust through the receipt of dividend shares issued by the Trust or through the reinvestment of cash dividends in Trust shares purchased in the open market. The dividends of each shareholder will be automatically reinvested in the Trust by Shareholder Financial Services Inc., the Transfer Agent, in accordance with the Plan, unless such shareholder elects not to participate by providing written notice to the Transfer Agent. A shareholder may terminate his or her participation by notifying the Transfer Agent in writing.

Participating shareholders may also make additional contributions to the Plan from their own funds. Such contributions may be made by personal check or other means in an amount not less than \$100 nor more than \$5,000 per quarter. Cash contributions must be received by the Transfer Agent at least five days (but no more than 30 days) before the payment date of a dividend or distributions.

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Whenever the Trust declares a dividend payable in cash or shares, the Transfer Agent, acting on behalf of each participating shareholder, will take the dividend in shares only if the net asset value is lower than the market price plus an estimated brokerage commission as of the close of business on the valuation day. The valuation day is the last day preceding the day of dividend payment.

When the dividend is to be taken in shares, the number of shares to be received is determined by dividing the cash dividend by the net asset value as of the close of business on the valuation date or, if greater than net asset value, 95% of the closing share price. If the net asset value of the shares is higher than the market value plus an estimated commission, the Transfer Agent, consistent with obtaining the best price and execution, will buy shares on the open market at current prices promptly after the dividend payment date.

The reinvestment of dividends does not, in anyway, relieve participating shareholders of any Federal, state or local tax. For Federal income tax purposes, the amount reportable in respect of a dividend received in newly-issued shares of the Trust will be the fair market value of the shares received, which will be reportable as ordinary income and/or capital gains. As compensation for its services, the Transfer Agent receives a fee of 5% of any dividend and cash contribution (in no event in excess of \$2.50 per distribution per shareholder.)

Any questions regarding the Plan should be addressed to Shareholder Financial Services, Inc., Transfer Agent for MassMutual Participation Investors' Dividend Reinvestment and Cash Purchase Plan, P.O. Box 173673, Denver, CO 80217-3673.

MASSMUTUAL
PARTICIPATION INVESTORS

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