Off Wall Street
Consulting Group, Inc.

P.O. Box 382107
Cambridge, MA 02238

tel: 617.868.7880
fax: 617.868.4933
internet: research@offwallstreet.com
www.offwallstreet.com

New Recommendation: Intergraph (INGR: $18.65) April 13, 2003

Position: Buy **Target: $27** **Timing: 2 (1=aggressive; 5=cautious)**

$MM	4Q-02	1Q-03e	2Q-03e	3Q-03e	2002a	2003e	2004e
REVS	122	123	125	126	501	500	531
EPS*	0.06	0.07	0.09	0.09	0.26	0.35	0.54
Y/Y Gr	N/A	-16%	-77%	18%	13%	33%	56%
PE	N/A	N/A	N/A	N/A	71.7x	53.8x	34.6x
PSR	N/A	N/A	N/A	N/A	1.8x	1.8x	1.7x
Consen*	0.06	0.07	N/A	N/A	0.26	0.34	N/A

*Operating EPS; estimates exclude IP related expense/income. Tax rates: 2002=19.4% 2003=42% 2004=42%

Shares Out: 48.5 M **Market Cap: $905 M** **FYE: Dec**

Summary: Intergraph provides technical IT solutions. The company's focus has been on graphics oriented applications, user interfaces, and computer systems. Intergraph has largely transitioned out of the proprietary hardware business to focus on software and services, but the company retains hardware related patents that have yielded substantial cash payments. Ongoing enforcement and licensing of the company's intellectual property may provide additional payments and a high margin revenue stream.

Intergraph's four core businesses units include: Process, Power & Offshore (PP&O) which primarily provides software for the design, construction, and operation of plants and ships; Intergraph Public Safety (IPS) which provides software, computers, and services to public safety agencies; Intergraph Solutions Group (ISG), a management and IT consulting division; and Intergraph Mapping and Geospatial Solutions (IMGS) which provides related software, services, and equipment to clients that include utilities, communication companies, government agencies, and educational institutions. In addition, the company breaks out Intellectual Property (IP) and corporate overhead as distinct reporting units.

Key intellectual property includes "Clipper" patents relating to memory architecture and processor-memory interaction, as well as "PIC" or parallel instruction computing patents.

We think Intergraph's intellectual property offers significant upside potential. We estimate Intergraph's intellectual property will result in additional payments of at least $660 million, or $8 per share after taxes. Further upside of $450 million to $900 million ($5 - $11 per share after taxes) up to a total of $19 is possible if slightly more aggressive assumptions are used to value the Clipper patents. Under still more aggressive assumptions, as we discuss later, the numbers can get larger still, but reasonable recovery becomes an issue. Intergraph's intellectual property has already yielded cash compensation of more than $460 million and various patents and license rights.

Clipper related disputes have been settled with Intel and IBM, and lawsuits have been filed against Hewlett Packard/Compaq, Dell, and Gateway. Discussions with these and other OEMs are ongoing. PIC patents have produced a favorable ruling in a dispute with Intel, and Intergraph recently filed suit against Texas Instruments for infringement. A recent PIC license agreement with Fujitsu for future products and negotiations with others will likely provide a recurring, high margin revenue stream.

We think operations offer additional unrealized value. Investors may be valuing operating units at about 0.5x 2002 revenue of $501.2 million, or $5 per share. We think a more appropriate value is $8, based on the future value of cash from operations in a better economic environment. A valuation more in line with other software and service firms suggests additional upside, to as high as $13, as we discuss later.

Overall operations are currently being managed at slightly better than breakeven, with infrastructure in place to support revenue about 20% higher than the current $500 million run rate. As revenue increases to this level in a healthier economic environment, or if infrastructure is brought in line with current revenue, we think operating margins could be in the realm of 10%.

Visibility is limited across Intergraph's four main operating units. Management has indicated it sees signs demand is stabilizing, but timing for a resumption in growth is uncertain. We think near term top line revenue may be uneven due to the timing of one-time, third-party hardware sales and as the company works off legacy hardware maintenance contracts. Both of these revenue sources tend to be lower margin and have relatively little bottom line impact.

Intergraph also has $10.40 per share in surplus assets on its balance sheet. About $9.25 in cash less taxes due is largely a result of IP related settlements and awards from Intel, and we think the company has at least $1 per share in the form of investments and real estate listed for sale.

Our target price for shares of Intergraph is $27. For our target we value operations at $8, cash, investments and property at $10.80, and the future value of intellectual property at $8.20. We also think that $34.50 is a reasonable target. This valuation would have operations at $10, cash, investments and property at $11.20, and future value of intellectual property at $13.62. Our best case scenario is $43.50 per share, with operations valued at $13, cash, investments and property at $11.20, and future value of intellectual property worth $19.33.

Shares of Intergraph are currently trading at $18.65. Assuming that $5 of the current price is attributable to operations, and over $10 attributable to cash, investments, and surplus property, we view the difference between $15 and the current market price as a call option on Intergraph's intellectual property, which we value at between $8 and $19 per share, and on operational improvement. We think investors realize there is additional value in the company's intellectual property but are understandably having trouble estimating its potential.

Reaching even the initial target price will likely take some time and will hinge on further settlements, license agreements, verdicts, or royalty payments. We think the greatest risk to our valuation would be Intergraph's inability to further monetize its intellectual property by failing to reach license agreements or being unable to enforce claims in court. Should this be the outcome, we would expect investors to be disappointed. However, book value of $12.80, most of which is in cash, and the potential value of cash from operations should provide support. Potentially providing additional support, the company has been repurchasing shares and retired nearly 10% of shares in 2002 at a average price of $17.69. At the end of December, the company had authorization to repurchase an additional $90 million worth of stock under its current buyback plan.

Background:

Intergraph was founded in 1969 as M&S Computing, a technology consultant to government agencies. The company founders previously worked for IBM's Federal Systems Division in Hunstville, Alabama, developing guidance software for the Saturn rocket program.

The company initially developed computer graphics technologies and application oriented user interfaces. Intergraph's first computer system offerings were used for designing circuit boards and mapping applications. Intergraph expanded to develop interactive graphics systems and engineering workstations. The company changed its name to Intergraph (short for Interactive Graphics) in 1980 and went public in 1981.

In the mid 1990s the company migrated from its Clipper RISC processor to Intel microprocessors and from UNIX to the Windows operating system. In 1996 a dispute arose between Intergraph and Intel over patent rights, and Intergraph lost key access to support and technical information for Intel's processor line. The company's computer systems lost ground against peers, and in 1999 the company exited the PC and generic server market, and exited its remaining hardware businesses in 2000.

Intergraph filed suit against Intel in 1997 to enforce its Clipper patents, as Intel had incorporated the technology in its Pentium processor line. Subsequently, Intergraph placed a number of OEMs on notice for potential patent infringement. We think the company is in negotiations with other processor or component vendors, such as AMD, that might similarly infringe. Suits were filed against Dell, Gateway, and Hewlett Packard in 2002, and a settlement was reached with IBM in 2003.

Intergraph filed an additional suit against Intel in 2001 to enforce PIC patents that Intel had copied in its Itanium processor design. The case was filed in the US District Court for the Eastern District of Texas and a finding for Intergraph was made in October 2002. Intel has appealed, and final resolution is expected before the end of 2003. Intergraph has also filed suit against Texas Instruments as PIC technology is believed to be used in the TMS320C6000 (C6000) family of digital signal processors (DSPs).

Intergraph's suits against the three OEMs and Texas Instruments were filed in the same court that delivered the favorable Intel ruling. We think this is significant as the court has already upheld the validity and enforceability of the PIC patents, and the court has shown a proclivity for quick, efficient outcomes. The Intel PIC dispute should be wrapped up in less than 2 years while the Clipper case, filed in Alabama, took more than twice as long.

We think additional lawsuits or license agreements are likely. However, Intergraph has not disclosed the identity of any parties with whom it is negotiating.

As reflected in Table 1, the company shrank considerably and sold off numerous assets as it transitioned to software and services and worked to capitalize on its intellectual property. The sales force has decentralized and specialized, providing greater flexibility, accountability, and operational independence. Economic weakness has made a challenging transition more difficult, especially with significant telecom and energy utility customers. The company continues to work off legacy hardware maintenance contracts, but management managed to keep operations at breakeven or better in 2001 and 2002. This demonstrates sound management. Many other software and service firms have reported losses.

Table 1: 1997 - 2002 Financials ($M)

	1997	1998	1999	2000	2001	2002
Revenue	1,095.6	1,005.0	914.9	690.5	532.1	501.2
Reorganization Charge	1.1	15.3	15.6	8.5	(0.4)	2.1
Operating Income	(38.2)	(101.0)	(67.4)	(23.6)	8.1	8.3
Gain on Patent Litigation	0.0	0.0	0.0	0.0	0.0	440.6
Gain on Asset Sales	4.9	112.5	13.2	49.5	11.2	17.2

Source: Company reports

The broader IT environment continues to be challenging as economic uncertainty curbs commercial spending, budgetary constraints limit state and local government spending, and higher priority activities have delayed spending for several federal IT programs. However, Gartner Dataquest anticipates worldwide IT spending will grow 5.3% in 2003 after growing 0.9% in 2002, and spending is expected to see 5.6% average growth thereafter.

Intergraph is an international company, with sales from outside the US at 43% and 47% in 2002 and 2001, respectively. The US government is the company's largest customer with about 27% of revenue, and most government work is performed under long term contracts.

Discussion:

1. Intellectual Property

Intergraph's intellectual property is largely a legacy of its hardware business. The greatest use of its patented technology has been in personal computers, but it is increasingly being incorporated into consumer electronics.

We think Intergraph's intellectual property is worth at least $660 million, or $8 per share after taxes. We see an additional $450 million - $900 million ($5 - $11 per share after tax) in possible upside if slightly more aggressive assumptions are used to value the Clipper patents. The company has additional patents and license rights that we think add value, but we do not include these in our calculation.

Intergraph is enforcing infringement claims and negotiating license agreements at a current cost of $2 million - $3 million per quarter. This expense is an investment, and we are backing it our of our operating projections. The outcome of negotiations or litigation is impossible to predict with any certainty, but we think awards, settlements, and license agreements announced to date support our expected value.

(a) Clipper Patents

Intergraph's Clipper patents comprise five processor and system level patents that basically provide a blueprint for high-speed interfaces and interaction between a processor and memory within a computer system.

We calculate Intergraph's Clipper patents are worth at least $500 million, or $6 per share after taxes, based on a nominal royalty per computer shipment. Using the IBM settlement as a benchmark suggests a value of $950 million, or $11 per share. If Intergraph is aggressive in seeking damages or larger royalty payments, we think there could be an additional $450 million of upside.

Intergraph and Intel reached a settlement in April 2002 for Clipper related litigation dating back to 1997. Intergraph claimed Intel infringed on its Clipper patents with the Pentium processor line. From Intel's 2000 10K, we know that "Intergraph's expert witness [has] claimed that Intergraph is entitled to damages of approximately $2.2 billion for Intel's alleged patent infringement…." However, the settlement was for $300 million. We think Intel essentially paid for itself and declined to indemnify its customers.

Specifically excluded from the Intel settlement was "…immunity for any in-combination use of Intel's products with any non-Intel product….". Intel is required to send a letter to its OEM customers notifying them of this upon Intergraph's request. The single exception is if a customer used an Intel processor and an Intel motherboard in a system. Assuming an Intel motherboard was not used, OEMs would appear to infringe the Clipper patents if a Pentium processor were combined with a non-Intel chipset or a non-Intel DRAM. As a note, Intel makes chipsets, but it exited the DRAM business in the 1980s.

Intergraph benefited by settling when it did. The company was faced with a 5-year statute of limitations to collect on claims against OEMs since they were put on notice or to file suit as a means of stopping the clock. Resolution reinforced Intergraph's patent claims and reduced uncertainty surrounding the company's ability to prevail in court. In December 2002 Intergraph filed suit against Dell, Hewlett Packard, and Gateway. In January 2003 Intergraph and IBM resolved claims against each other with a 10 year cross license agreement and IBM's transfer of $10 million and 25 patents.

Intergraph stands to collect substantially more than the $310 million it has already collected for Clipper patent infringement. Placing a value on expected payments is difficult, as future cash received will be the outcome of negotiated license agreements or pending legal actions. In addition, some compensation may be in the form of patent transfers or licenses. However, we think (i) the company's license agreement with IBM or (ii) a nominal royalty per unit shipped can provide some insight into future value.

It should be noted that neither estimate reflects server sales or potential differences in component mixes. As suggested above, claims may vary depending on whether or not the OEM was using an Intel chipset, DRAM, or motherboard with an Intel processor. Information about Intel's motherboard business is hard to come by, but industry sources indicate it is currently a low volume business primarily focused on supporting Intel's high end microprocessors and servers. We estimate Intel has less than 10% market share at present, and it may be closer to 5%. In addition, Intel has a substantial presence in the chipset market, but it exited the DRAM business in the late 1980s.

(i) Using the IBM settlement as precedent and extrapolating from respective market share, we calculate recoverable value of about $950 million from the Clipper patents.

Unlike other OEM disputes, IBM had its own claims against Intergraph dating back to 1993. During Intergraph's 4Q02 conference call, management said "[IBM's claims] ended up totaling several hundred million dollars…." Under the settlement, these claims canceled out against Intergraph's Clipper claims, IBM and Intergraph entered a full cross license agreement, and IBM transferred 25 patents and $10 million to Intergraph.

IBM represented 7.2% of the worldwide PC market between 1997 and 2002, and Dell, Hewlett Packard, and Gateway comprised nearly 33% (Figure 2). Using $100 million rather than the "several hundred million" of counterclaims and difficult to quantify settlement terms, we can extrapolate a value of roughly $500 million for the suits against these three OEMs. Extrapolating further suggests all other OEMS could be on the hook for an additional $930 million. Given the time and cost of pursuing some of the smaller, foreign based, or now defunct OEMs, we are only counting 50% of this additional value. Still, we get a total of over $950 million by this method.

Figure 2: Worldwide PC Vendor Unit Shipment Market Share

	1997	1998	1999	2000	2001	2002	1997-2002
HP/Compaq	18.4%	19.6%	20.0%	20.4%	18.4%	16.2%	18.8%
Dell	5.5%	7.9%	9.7%	10.8%	13.2%	15.2%	10.9%
Gateway	3.2%	3.8%	4.0%	3.8%	2.5%	2.1%	3.2%
IBM	8.6%	8.2%	7.9%	6.8%	6.4%	6.0%	7.2%

Source: Gartner Dataquest, Company reports

(ii) An alternative method that provides a more conservative valuation of nearly $500 million is to consider a flat license fee of $1 per system.

Such a license fee works out to much less than 1% of the cost of a computer system. Sources have indicated reasonable royalties can range from 25 basis points of product revenue to as much as 400 - 500 basis points. We do not know how each license agreement will be structured, but we expect Intergraph to seek the same overall economics.

Dell, Hewlett Packard, and Gateway shipped a combined 226 million units between 1997 and the end of 2002 (Figure 3). Assuming only 75% of PC systems were Intel systems (in 4Q02 share was closer to $84% according to Mercury Research) suggests remedial payments of $170 million. Assuming the three OEMs match or exceed 2002 shipments of Pentium systems over each of the next three years (although patents will not expire until 2009), the present value of future payments would be about $90 million for a combined value of $260 million. If Intergraph were able to collect from the remaining OEMs, the additional value would be $470 million. Again, we are only giving the company credit for half of this additional value

Figure 3: Worldwide PC Vendor Unit Shipments ('000s)

	1997	1998	1999	2000	2001	2002	1997-2002
HP/Compaq	14,893	18,180	23,470	27,440	23,677	21,478	129,138
Dell	4,464	7,361	11,459	14,536	17,004	20,112	74,936
Gateway	2,580	3,561	4,745	5,110	3,267	2,745	22,008
IBM	6,958	7,617	9,331	9,162	8,232	7,928	49,227
Total	80,608	92,925	117,626	134,738	128,931	132,350	687,179

Source: Gartner Dataquest, Company reports

If Intergraph sought a $1 royalty for each of the three Clipper patents from OEMs, the numbers could obviously triple. $500 million in potential value could become $1.5 billion. If an OEM's case went to court and willful infringement was found, Intergraph could receive treble damages. The numbers can become quite large, but reasonable recoverability becomes an issue. Accordingly, we prefer to be conservative and think more settlements may follow.

(b) PIC Patents

Intergraph's PIC patents comprise three patents relating to parallel instruction computing. The technology improves processor performance by enabling a processor to handle multiple instructions simultaneously rather than one at a time.

We think the PIC patents are worth at least $160 million, or $2 per share after taxes. We expect Intel to lose its appeal of an October 2002 court decision finding infringement of Intergraph's PIC patents, resulting in a $100 million payment. Meanwhile, the future value of royalties from Fujitsu and historical claims against Texas Instruments are probably worth $20 - $40 million each.

Intergraph's October 2002 win against Intel was in a case filed in 2001 addressing Intel's infringement of the PIC patents in its Itanium processor line. The decision has already resulted in an irrevocable payment of $150 million. Under a framework previously agreed to by both parties, Intel would make a $150 million payment to Intergraph in the event the court ruled PIC patents were "infringed, not invalid, and enforceable." Intel would then have the option to: (1) pay an additional $100 million for license to the disputed patents; (2) design around Intergraph's patents; or (3) appeal and pay an additional $100 million for license if the original finding is upheld for either patent. Intel elected to appeal, and we expect a decision by year-end.

Fujitsu and Intergraph reached a license agreement in September 2002 covering future use of the technology by Fujitsu's consumer electronics division. Payment terms were $100k up front and 1% of revenue from products using the technology, payable twice per year. In Fujitsu's last fiscal year, the Electronic Devices group produced Y398 billion or more than $3 billion worth of semiconductors. Every 1% of future penetration translates to roughly a $300k payment. Historical PIC patent infringement was not an issue for the company. At best guess, the future value of royalty payments could total $20 million to $40 million.

A suit against Texas Instruments was filed in the same Texas court that delivered a speedy, favorable ruling in the Intel PIC case. Texas Instruments appears to infringe the PIC patents with its C6000 family of DSPs, introduced in 1997. C6000 DSPs are used in medical equipment, communications equipment, digital recorders, and more. Texas Instruments issued a press release in October 2000 claiming more than $3 billion in expected revenue for the C6000 family between inception and 2004 or so. Using the Fujitsu royalty rate benchmark suggests Intergraph is due at least $30 million.

We think Fujitsu and Texas Instruments' use of the PIC patents is significant as it establishes Intergraph's patents in the consumer electronics industry, a market worth $10s to $100s of billions. Industry analysts have suggested consumer electronics are likely to a major source of future growth for the semiconductor industry.

(c) Other Patent and License Rights

Intergraph has more than 100 other patents in its portfolio, potentially providing royalty payments or bargaining chips for use when negotiating licenses or settlement agreements for its Clipper and PIC patents. The company also has license to IBM's patent portfolio. However, we are not including potential value from these patents and license rights in our valuation.

Intergraph will not need to worry about infringing on IBM patents when developing its own products or when acquiring a company that potentially infringes IBM patents. Based on the cross license agreement included in Intergraph's recent 10K, it does not appear that Intergraph could use the agreement to improve the cost structure of an acquired company making payments to IBM prior to acquisition. If Intergraph (or IBM) were to be acquired, the benefit to the acquiring party would be limited to patents in use.

2. Operating Units

The company currently reports four core operating units: (a) Power, Process & Offshore (PPO) and (b) Intergraph Public Safety (IPS) are predominantly software, (c) Intergraph Service Group (ISG) is a services unit, and (d) Intergraph Mapping and Geospatial Solutions (IMGS) is a combination of software, services, and some product.

The operating units reported 2002 revenue of $509.8 million and operating income of $38.7 million. Revenue and expense from corporate overhead, the Intellectual Property group, and internal eliminations are not included.

We think investors may be applying a conservative 0.5x revenue valuation of about $5 per share to operations. We think more efficient operations in a better business environment could be worth $10 or more per share based on future cash flow or a multiple of 1.0x revenue.

(a) Power, Process & Offshore (PPO)

Intergraph's PPO division primarily provides software and services for the design, construction, operation, and maintenance of plants, rigs, and ships in process, power, offshore petroleum, and marine industries. Key software packages include: PDS, a computer-aided design and engineering (CAD/CAE) application for plant design, construction, and management; SmartPlant for lifecycle engineering and enterprise information management; and MARIAN for procurement and supply chain management. Clients include petrochemical, chemical, pharmaceutical, food and beverage, oil and gas, power generation, pulp and paper, mining, and shipbuilding companies.

Many of these industries have been operating in an economic slowdown or recessionary environment. In addition, plant investments can lag economic trends by about two years. However, in 2002 revenue of $124 million increased 7% from 2001, and operating income of $19 million increased from about $6.8 million in 2001 due in part to cost reductions and growth in higher margined products. More significantly, the company increased its market share in the overall plant creation software and services market to 36% from 31% in the prior year, according to Daratech research.

We think the company's technical skill and understanding of the complex processes and systems involved in the industries in which it competes helps provide a competitive advantage. Intergraph owns roughly one third of the number two player, Bentley Systems, which has 27% market share. AVEVA and Autodesk are the number 3 and 4 players with 12% and 9% share, respectively.

(b) Intergraph Public Safety (IPS)

The IPS division provides Windows-based software and related services to public safety agencies, commercial fleet operations, campus, military base, and airport security. Software includes dispatch systems that leverage the company's geographic information systems expertise, records management, and information management and reporting systems. Roughly two thirds of revenue is domestic, and customers include the largest national, federal, state, and local agencies. Until 4Q02 the group included Intergraph's Communications and Utilities, which has since been incorporated in IMGS.

In 2002, revenue of $63.6 million increased about 4% over $60.9 million in 2001(excluding Communications and Utilities). Operating income increased to $14.7 million from $8.2 million, boosted by higher revenue on flat operating expenses, improved gross margins, and a one time sale of software and systems associated with the completion of a large project in Australia.

Public Safety related information technology is a multi billion dollar market, with various industry sources calling for 7% to 20% growth. Homeland security initiatives are expected to support near term growth while the group also has a large revenue base from dedicated funding sources, such as 911 phone surcharges.

(c) Intergraph Solutions Group (ISG)

ISG is Intergraph's professional services division, providing consulting, IT services, and specialized technology solutions. The majority of ISG contracts are with the US Department of Defense for the Navy and Air Force, but the company has been growing its commercial business The current business mix is about 70% government and 30% commercial.

2002 revenue of $127 million was down from $134 million in 2001, and net income of $5.9 million is down from $10 million. Most of the decline in revenue and operating income is from the run off in Intergraph's legacy hardware maintenance business that will continue into 2003. Most work is performed under long term contracts, and backlog at the end of 2002 stood at $65.5 million. It should be noted that top line revenue can be lumpy due to one-time, third-party product sales as part of select engagements. Such product sales are typically low margin.

The broader IT services market remains weak, particularly in the commercial sector. On the government side, a significant portion of initial homeland defense spending appears to have gone into personnel and physical security measures rather than technology. Meanwhile, the federal government has made the war in Iraq a priority. Overall competition has increased as many larger consulting and technology outsourcing firms have increased their focus on the traditionally less-profitable government sector to keep consultants off the beach. We think the company's technical expertise and strong track record with the government should help it continue to win new and repeat business even as the market remains weak.

(d) Intergraph Mapping and Geospatial Solutions (IMGS)

Intergraph's IMGS division provides mapping, geographic information systems (GIS), remote sensing, cartographic software, and related technology services. Clients include utilities, communication companies, government agencies, and educational institutions. In October 2002 Intergraph purchased the outstanding 40% interest in Z/I Imaging, a JV with Carl Zeiss B.V., and the Communications & Utilities practice was moved into IMGS from IPS.

IMGS has been impacted by a slowdown in spending from utilities and communication clients. Division revenue in 2002 was $195.1 million, down from $222.7 million in 2001 (including Utilities and Communications). The company reported a full year 2002 operating loss of $1 million compared to 2001 operating income of $6.0 million. Restructuring is expected to return the group to breakeven or profitability in 2003.

The GIS and earth imaging markets have been impacted by broader economic weakness and specific cutbacks on spending in the telecom and utility sectors. Meanwhile, the US Government mapping sector has remained strong. The overall market is fairly mature, and Intergraph has been in the business and building relationships for more than 25 years. Competition is mostly provided by ESRI in GIS, GE Network Solutions in Utilities and Communications, and Leica Geoystems in photogrammetry.

3. Other Assets

We calculate Intergraph has at least $10.40 of other investments in a combination of cash, investments, notes payable, and surplus property. Intergraph has no debt.

At the end of 2002, cash and short term investments totaled $506 million. Intergraph should have already received an additional $10 million payment from its settlement agreement with IBM. Half was due in 1Q03 and the remainder before April 10, 2003. Backing out taxes due on the IBM payments and the Intel PIC settlement results in about $9.25 per share.

The company holds 1.5 million shares of publicly traded Creative Technology as a result of an asset sale to 3Dlabs, later acquired by Creative. At recent prices, the position has a value of about $9.7 million or about $0.20 per share.

Intergraph holds 34% of the equity and a $9.7 million (as of December 2002) note payable from Bentley Systems. Bentley is a privately held software firm that competes with Intergraph's PPO division and whose software Intergraph distributes on a non exclusive basis. Bentley filed an S-1 for a public offering in 2001, a deal that never happened. In the filing the company discloses 2001 revenue of $202.6 million and net income of $4.1 million. We do not know more recent financial results, but at a valuation of 0.5x to 1.0x 2001 revenue, the investment could be worth $35 million - $70 million before tax. This translates to about $0.50 - $1.00 per share after tax. However, we are valuing the interest in Bentley at Intergraph's carrying value of about $9 million plus the note payable, or about $0.39 per share It should be noted that Bentley and Intergraph have had a somewhat litigious relationship, and with claims outstanding against each other, the remainder of the note payable might not be collected in full.

In addition, Intergraph has surplus property that it is available for sale that could bring in about $27 million, or $0.56 per share.

Finally, to help cut future tax bills, Intergraph has a $66 million international net operating loss carry forward, of which $9.6 million expires in the next 3 years. The asset is being carried on the books at a valuation of $21 million, but we are not including it in our valuation since the losses are scattered around the world and we do not know when or if it will be fully used.

4. Share buyback

Intergraph purchased 4.7 million shares, nearly 10% of shares out, at an average price of $17.69 in 2002. The company has authorization for the repurchase of an additional $90 million by the end of 2004. We expect the company to continue repurchasing shares. However, restrictions on open market transactions may limit the amount purchased in any given period.

The company believes it can safely purchase about 10% of shares in a 12 month period without a formal tender offer. Given that most 2002 purchases were after May or June, we do not expect much in the way of additional buybacks until the middle of this year. Additional restrictions on buybacks may arise as a result of the timing of discussions around patent enforcement actions and announcements.

5. Management

Chairman, and CEO James Taylor announced in October 2002 that he would be stepping down as CEO as soon as a replacement was found. He is considered one of the founders, having joined in 1969. A search is underway for a replacement. Many of the other executive officers have been with the company for 20 years or more.

Insiders have been net sellers of shares of Intergraph in 2002 and year to date. We think this reflects more the 50% to 200% price appreciation from where shares spent much of the late 1990s and into 2001 rather than the company outlook. Of 13 insiders reporting transactions, 5 were net purchasers.

From the company's 2002 and 2001 proxies, we know that insiders owned 541,069 shares at the end of 2002, down from 576,181 at the end of 2001. Insider ownership is less than 1.5%, and one executive owns 265,135 shares. Five of six outside directors own 3,000 or fewer shares apiece.

We are impressed with the company's ability to successfully exit the hardware business and develop its software and services business into a distinct and profitable businesses under weak economic conditions. We think management is displaying conservatism by focusing on businesses it knows and repurchasing shares instead of making transforming acquisitions.

6. Catalysts

Two likely patent related events that we know of and which could move shares of Intergraph are: (1) a Fujitsu royalty payment in 2Q03 that could provide some insight into the company's use of PIC technology and future payments and (2) expected resolution of the Intel PIC appeal before the end of the year.

We think there are a number of other possible events. However, their timing is uncertain. Included are: additional royalty agreements, new enforcement actions, and possible settlement of pending litigation. We think any of these events could serve to further affirm the value of Intergraph's patents and provide better visibility on potential value.

We are encouraged by IBM's settlement, and we think Fujitsu may be negotiating Clipper licenses in good faith given that Fujitsu already licensed the PIC technology. Fujitsu and Fujitsu Siemens combined would represent the world's fourth largest PC vendor based on 2002 shipments, after Hewlett Packard, Dell, and IBM.

To the extent parties are drawn into lawsuits that make it to court, recognition of some payments may be several years out. However, we note that recent lawsuits have been filed in the same Texas court that fast tracked the Intel PIC resolution and facilitated the settlement of the Alabama Clipper suit.

7. Financials

In 2002, the company reported revenue of $501.2 million. The company's four operating units generated operating income of $38.7 million. Corporate overhead expense was about $22.0 million, and patent enforcement related expenses totaled $6.6 million. Restructuring charges and eliminations netted an additional $1.8 million expense. In total, reported operating income was $8.3 million.

Looking at 2003, we think top line results may be about flat until the economy improves. We are essentially projecting forward from the company's 4Q02 run rate and anticipating some further run off from legacy hardware maintenance. Given that the company is holding its operating cost base fairly fixed in anticipation of a rebound, a greater then expected falloff could push the company to a loss. At the end of 2002, the company's backlog of unfilled orders totaled $193 million, down from $231 million in 2001.

Backing out IP related legal expenses and consultant fees from G&A expense provides a better picture of the core business units' performance as these can fluctuate unpredictably due to the timing of trials and negotiations. "Street" EPS estimates exclude these expenses as well. Excluding these expenses, we think Intergraph will report about $22 million in operating and $17 million in net income in 2003. We are also using an estimated "normal" 42% tax rate rather than incorporating the potential use of Intergraph's net operating loss carryforwards. Using these assumptions, we arrive at a $0.35 EPS estimate for 2003. The company's 2002 effective tax rate was 19.4% due to benefits from prior losses.

With little visibility on the economy, we are not projecting much of a pick up in business until 2004. We think it may take several years to reach the $600 million in revenue that the current expense base can support, but this could happen earlier with an economic rebound or as more homeland security spending begins to reach information technology.

We are probably being overly conservative in projecting a 4.5% terminal growth rate of cash flow for use in our WACC calculation. A 6% growth rate assumption, for example, more in line with expected IT spending growth, would add another $3 per share to our valuation of the company's operations.

8. Valuation

Our initial price target for shares of Intergraph is $27.

The largest variable in our valuation is the intellectual property. Should Intergraph be unable to further collect on its patents for whatever reason, we think upside could be capped at $20 - $21. Alternatively, as discussed above and below, we think our valuation is conservative and greater upside, even into the mid $40s is possible. Reaching the target price will likely take some time and depend on further settlements, license agreements, verdicts, or royalty payments.

Table 4 summarizes our target and value estimates for the three major pieces of Intergraph: (a) intellectual property, (b) operating units, and (c) surplus assets.

Table 4: Estimated Current and Potential Value Per Share

	Current Value	Target Price	Reasonable Potential	Best Case Scenario
(a) Operating Units	$5.15	$8.00	$10.00	$13.00
(b) Cash, Investments, and Property	$10.40	$10.80	$11.20	$11.20
(c) Intellectual Property	$3.10	$8.20	$13.62	$19.33
Total	$18.65	$27.00	$34.62	$43.53

Source: OWS estimates

(a) IP Valuation

We think a Intergraph's intellectual property is worth at least $8 per share, with a valuation of $13 reasonable. We think an additional $5 or more of upside to $18 or $19 is possible if Intergraph is more aggressive in seeking higher royalty payments than our conservative forecast.

We think Intergraph's Clipper patents offer the largest, most immediate opportunity for upside. From each of our valuation methods, we come up with a value of $6.11 to $11.62 assuming the company is able to collect from Dell, Gateway, and Hewlett Packard and at realize at least 50% of potential value from other OEMs. We have tried to be conservative in our calculations, and we are not including potential awards, settlements, or agreements from other processor manufacturers such as AMD or the use of technology in non PC products such as Microsoft's Xbox.

PIC patents appear to afford an intermediate to longer term value proposition as instances of historical infringement are less clear. That being said, we think there is a high probability of favorable resolution in the Intel appeal by the end of the year, and Fujitsu royalty payments might begin in 2Q03. Combined with the Texas Instruments suit, we think the PIC patents will be worth more than $2.00 per share after tax.

A loss in court while trying to enforce its intellectual property would be an obvious setback, reducing visibility on potential payments. Losses can be appealed, and we do not think a single loss on either the Clipper or PIC patents would negate the value of each patent.

(b) Operations

We calculate the present value of the company's operating units to be about $8 per share, although this value is somewhat obscured by current operating results. Given that the overall company is operating at breakeven, we think investors may be applying a more conservative value of about 0.5x revenue, or slightly more than $5 per share.

Rather than maximize operating efficiency at the current revenue run rate, the company has kept infrastructure in place to support a revenue base about 20% or $100 million higher. Accordingly, we think the company will have a fair amount of leverage to improve operating margins to 10% or more as business picks up.

Our DCF valuation, shown in Table 5, yields a value of more than $10 per share at the higher revenue level. We think this level may be achieved within the next 2 - 3 years, suggesting a current valuation of $7.80 - $8.62 per share. This value does not include cash earned from operations in the interim. As we mentioned earlier, a perpetual growth rate assumption of 6% would add $3 per share.

Table 5: Operating Units Value Computation ($M, except share data)

Revenue	600.0
Operating Income @ 10% Margin	60.0
Net Income w/ 42% Tax Rate	34.8
+ D&A - CapEx	0.0
- Change Work Cap	(5.0)
Cash Flow	29.8
WACC (B = 0.86/Rf = 5%/Rp = 6.5%)	10.6%
Perpetual Growth Rate	4.5%
Net Debt	0.0
Value to Equity	511.3
Shares Out	48.5
Share Value	10.54
Present value* per share if discounted back:	
1 Year	9.53
2 Years	8.62
3 Years	7.80
4 Years	7.05
* Does not include cash earned in the interim	

Source: OWS estimates

We think the business units could be acquired at a premium to this valuation by a larger entity able to absorb or replace Intergraph's corporate overhead. In 2002, corporate overhead consumed about $22 million and, although not broken out, included many costs that would not be incurred by the core businesses if they were independent companies.

We are generally not fans of valuation based on multiples of revenue, but we note that a company like Autodesk trades at about 2.0x revenue. At a 1.0x revenue of $500 million - $600 million, the business units would have an implied value of $10 - $12.

(c) Other Assets

In total, we calculate Intergraph has at least $10.40 worth of surplus assets. These are comprised of the cash, property, and investments discussed above. Depending on Bentley's financials, other assets could be worth $11.20 or more.

9. Financial Projections. (Note: we use a 42% tax rate for 2003 and 2004, which will probably prove to be too high.)

Intergraph ($ Millions)	2002	2003e	2004e
Total Revenue	501.2	500.1	530.9
Cost of Revenue	267.2	259.2	272.1
Gross Profit	233.9	240.9	258.8
R&D	50.7	52.4	53.1
S&M	96.7	98.0	98.6
G&A*	76.2	68.4	68.8
Reorg Expense	2.1	0.0	0.0
Operating Expense	225.7	218.8	220.5
Operating Income	8.3	22.1	38.3
Patent Litigation Exp/Inc*	440.6	-11.3	-12.0
Gain on Sale of Assets	17.2	0.0	0.0
Interest Income	4.1	6.9	6.8
Other Income	-1.0	0.0	0.0
Pretax Income	469.2	17.7	33.1
Taxes	91.1	7.4	13.9
Minority Interest	-0.3	0.0	0.0
Net Income	377.8	10.3	19.2
Net Income ex Pat Lit*	25.3	16.8	26.2
Diluted EPS	7.37	0.21	0.40
Diluted EPS ex. Pat Lit*	0.49	0.35	0.54
Diluted Shares	50.5	48.5	48.5

Y/Y Change	2002	2003e	2004e
Total Revenue	32%	0%	6%
Cost of Revenue	31%	-3%	5%
Gross Profit	34%	3%	7%
R&D	29%	3%	1%
S&M	35%	1%	1%
G&A*	36%	-10%	1%
Reorg Expense	NM	NM	NM
Operating Expense	35%	-3%	1%
Operating Income	6%	167%	74%
Patent Litigation Exp/Inc*	51%	-103%	6%
Gain on Sale of Assets	NM	NM	NM
Interest Income	93%	69%	-1%
Other Income	NM	NM	NM
Pretax Income	44%	-96%	87%
Taxes	146%	-92%	87%
Minority Interest	0%	NM	NM
Net Income	31%	-97%	87%
Net Income ex Pat Lit*	NA	-34%	56%
Diluted EPS	34%	-97%	87%
Diluted EPS ex. Pat Lit*	-10%	-29%	56%
Diluted Shares	-2%	-4%	0%

% of Revenue	2002	2003e	2004e
Total Revenue	100%	100%	100%
Cost of Revenue	53%	52%	51%
Gross Profit	47%	48%	49%
R&D	10%	10%	10%
S&M	19%	20%	19%
G&A*	15%	14%	13%
Reorg Expense	0%	0%	0%
Operating Expense	45%	44%	42%
Operating Income	2%	4%	7%
Patent Litigation Exp/Inc*	88%	-2%	-2%
Gain on Sale of Assets	3%	0%	0%
Interest Income	1%	1%	1%
Other Income	0%	0%	0%
Pretax Income	94%	4%	6%
Taxes	18%	1%	3%
Minority Interest	0%	0%	0%
Net Income	75%	2%	4%
Net Income ex Pat Lit*	5%	3%	5%

Intergraph ($ Millions)	Q1-02	Q2-02	Q3-02	Q4-02	Q1-03e	Q2-03e	Q3-03e	Q4-03e
Total Revenue	123.1	122.6	133.5	122.0	122.9	125.0	125.9	126.4
Cost of Revenue	67.3	63.7	73.4	62.8	64.5	65.0	65.3	64.5
Gross Profit	55.8	58.8	60.1	59.2	58.4	60.0	60.6	61.9
R&D	12.3	12.5	14.6	11.4	12.9	13.0	13.2	13.3
S&M	22.6	24.9	24.1	25.1	24.4	24.4	24.5	24.7
G&A*	19.1	18.8	18.1	20.2	17.0	17.1	17.1	17.2
Reorg Expense	0.0	0.0	0.0	2.1	0.0	0.0	0.0	0.0
Operating Expense	53.9	56.2	56.8	58.8	54.3	54.6	54.8	55.1
Operating Income	1.9	2.7	3.2	0.5	4.1	5.5	5.8	6.8
Patent Litigatn Exp/Inc*	0.0	293.6	-1.2	148.2	-2.3	-3.0	-3.0	-3.0
Gain on Sale of Assets	1.5	17.0	-1.3	0.0	0.0	0.0	0.0	0.0
Interest Income	-0.1	0.0	2.3	2.0	1.8	1.7	1.7	1.7
Other Income	1.7	2.5	1.2	-6.5	0.0	0.0	0.0	0.0
Pretax Income	5.1	315.7	4.2	144.2	3.6	4.2	4.5	5.5
Taxes	0.7	35.1	1.3	54.1	1.5	1.7	1.9	2.3
Minority Interest	-0.1	0.0	-0.2	0.0	0.0	0.0	0.0	0.0
Net Income	4.4	280.6	2.7	90.1	2.1	2.4	2.6	3.2
Net Income ex Pat Lit*	4.4	19.7	3.7	-2.5	3.4	4.2	4.3	4.9
Diluted EPS	0.08	5.37	0.05	1.85	0.04	0.05	0.05	0.07
Diluted EPS ex. Pat Lit*	0.08	0.38	0.08	-0.05	0.07	0.09	0.09	0.10
Diluted Shares	52.5	52.2	48.8	48.7	48.5	48.5	48.5	48.5

Y/Y Change	Q1-02	Q2-02	Q3-02	Q4-02	Q1-03e	Q2-03e	Q3-03e	Q4-03e
Total Revenue	-15%	-4%	5%	-8%	0%	2%	-6%	4%
Cost of Revenue	-22%	-9%	4%	-13%	-4%	2%	-11%	3%
Gross Profit	-4%	2%	7%	-3%	5%	2%	1%	4%
R&D	-6%	-11%	10%	-16%	6%	5%	-10%	17%
S&M	2%	-3%	8%	-4%	8%	-2%	2%	-2%
G&A*	-8%	11%	-2%	4%	-11%	-9%	-5%	-15%
Reorg Expense	NM	NM	NM	NM	NM	NM	NM	NM
Operating Expense	-3%	-1%	5%	-1%	1%	-3%	-4%	-6%
Operating Income	-34%	93%	49%	-72%	114%	104%	78%	1381%
Patent Litigatn Exp/Inc*	NA	NA	NA	NA	NA	-101%	153%	-102%
Gain on Sale of Assets	NM	NM	NM	NM	NM	NM	NM	NM
Interest Income	-82%	-94%	81%	-17%	-1848%	-4695%	-25%	-13%
Other Income	NM	NM	NM	NM	NM	NM	NM	NM
Pretax Income	-32%	7940%	27%	917%	-29%	-99%	7%	-96%
Taxes	-73%	2094%	-48%	2604%	133%	-95%	44%	-96%
Minority Interest	-62%	-93%	NM	NM	NM	NM	NM	NM
Net Income	-12%	15233%	115%	657%	-52%	-99%	-3%	-96%
Net Income ex Pat Lit*	NA	NA	NA	NA	-23%	-79%	18%	-294%
Diluted EPS	-14%	15178%	129%	707%	-48%	-99%	-3%	-96%
Diluted EPS ex. Pat Lit*	NA	NA	NA	NA	-16%	-77%	18%	-295%
Diluted Shares	3%	0%	-6%	-6%	-8%	-7%	-1%	0%

% of Revenue	Q1-02	Q2-02	Q3-02	Q4-02	Q1-03e	Q2-03e	Q3-03e	Q4-03e
Total Revenue	100%	100%	100%	100%	100%	100%	100%	100%
Cost of Revenue	55%	52%	55%	51%	52%	52%	52%	51%
Gross Profit	45%	48%	45%	49%	48%	48%	48%	49%
R&D	10%	10%	11%	9%	11%	10%	10%	11%
S&M	18%	20%	18%	21%	20%	20%	19%	20%
G&A*	15%	15%	14%	17%	14%	14%	14%	14%
Reorg Expense	0%	0%	0%	2%	0%	0%	0%	0%
Operating Expense	44%	46%	43%	48%	44%	44%	44%	44%
Operating Income	2%	2%	2%	0%	3%	4%	5%	5%
Patent Litigatn Exp/Inc*	0%	240%	-1%	122%	-2%	-2%	-2%	-2%
Gain on Sale of Assets	1%	14%	-1%	0%	0%	0%	0%	0%
Interest Income	0%	0%	2%	2%	1%	1%	1%	1%
Other Income	1%	2%	1%	-5%	0%	0%	0%	0%
Pretax Income	4%	258%	3%	118%	3%	3%	4%	4%
Taxes	1%	29%	1%	44%	1%	1%	1%	2%
Minority Interest	0%	0%	0%	0%	0%	0%	0%	0%
Net Income	4%	229%	2%	74%	2%	2%	2%	3%
Net Income ex Pat Lit*	4%	16%	3%	-2%	3%	3%	3%	4%

*2003 & 2004 estimated IP related G&A expense included in Patent Litigation Exp/Inc