Full Year Overview

Achieved significant progress against long-term earnings and sales growth targets

- > Sales up approx. 5% on organic basis, above high end of expectations, driven by higher volume
- > Operating margin, as reported, improved 160 basis points
 - » Adjusted operating margin improved 100 basis points
- > Reported EPS (including discontinued operations) of \$2.16
 - » Adjusted EPS (non-GAAP, continuing operations) of \$2.68, up 37%
- > Solid free cash flow from continuing operations of \$330 mil.

Continued to deliver on promise of sustained cost and capital discipline

- > Focused portfolio with sale of OCP and DES (effective July 1, 2013)
- > Drove step-function improvement in operating margin
 - » Achieved approx. \$75 million of restructuring savings
- > Returned \$396 million of cash to shareholders, including the repurchase of 6.6 million shares for \$283 million
- C. F. Sunth-Duarter House & The AC1793 Preasulat Presidence and Advancement Control and B1, 2014.

Fourth Quarter Overview and 2014 Outlook

Adjusted EPS near high end of company's expectations

- > Sales up approx. 7% on organic basis, above high end of expectations, driven by higher PSM volume
- Operating margin, as reported, improved 280 basis points due to lower restructuring charges and other items, as well as the benefit of productivity initiatives and higher volume, partially offset by the continued impact of changes in product mix and higher employee-related expenses
 - » Adjusted operating margin improved 110 basis points
 - » Restructuring savings of approx. \$15 million in the quarter
- > Reported EPS (including discontinued operations) of \$0.43
 - » Adjusted EPS (non-GAAP, continuing operations) of \$0.69, up 44%
- > Free cash flow from continuing operations above high end of expectations due to timing

2014 Outlook

- > Adjusted EPS growth of 8% to 19% on 3% to 5% organic sales growth
- > Solid free cash flow and strong balance sheet
- Continued intent to return majority of cash to shareholders, while investing for future productivity and growth
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Sales Trend Analysis

	<u>4Q12</u>	<u>1Q13</u>	<u>2Q13</u>	<u>3Q13</u>	<u>4Q13</u>
Organic Sales Change	6.7%	3.7%	5.0%	3.6%	6.6%
Currency Translation	(1.5%)	0.3%	(0.6%)	0.7%	0.2%
Reported Sales Change*	5.0%	3.9%	4.2%	4.0%	6.8%

*Totals may not sum due to rounding and other factors.

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Segment Sales and Margin Analysis

	4Q	13
	Reported	Organic
Sales Growth:		
Pressure-sensitive Materials	8%	8%
Retail Branding and Information Solutions	2%	3%
Other specialty converting businesses	15%	7%
Continuing Operations	7%	7%

			Adju	usted
	As Re	ported	(Non-	GAAP)
	4Q13	4Q12	4Q13	4Q12
Operating Margin:				
Pressure-sensitive Materials	9.5%	7.7%	9.6%	8.6%
Retail Branding and Information Solutions	7.4%	2.8%	7.5%	6.1%
Other specialty converting businesses	(12.1%)	(29.8%)	(12.1%)	(16.6%)
Continuing Operations	7.2%	4.4%	7.4%	6.3%



Fourth Quarter Segment Overview

PRESSURE-SENSITIVE MATERIALS (PSM)

- > Reported sales of \$1.15 bil., up approx. 8% compared to prior year
 - » Sales up approx. 8% on organic basis
- > Label and Packaging Materials sales up mid-single digits on organic basis
- Combined sales for Graphics, Reflective, and Performance Tapes up low double digits on organic basis
- Operating margin improved 180 basis points to 9.5% as the benefit of higher volume, lower restructuring costs, and productivity initiatives more than offset the impact of changes in product mix. Adjusted operating margin improved 100 basis points.

RETAIL BRANDING AND INFORMATION SOLUTIONS (RBIS)

- > Reported sales of \$417 mil., up approx. 2% compared to prior year
 - » Sales up approx. 3% on organic basis
- Operating margin increased 460 basis points to 7.4% as the benefit of productivity initiatives and higher volume, as well as the impact of a prior year impairment and a gain on sale of assets, more than offset higher employee-related expenses. Adjusted operating margin improved 140 basis points.

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Segment Results vs Long-Term Targets (2012 – 2015)

	ORGANIC SALES GROWTH		ADJ. OPERATING MARGIN ⁽¹⁾ ADJ. EBITDA MARGIN ⁽¹⁾		
	2012 - 2015 2012 / 2013 Target Results (4-Yr CAGR) (2-Yr CAGR)		2015 Target ⁽²⁾	2013 Results	
PSM	3 - 5%	4.4%	9 - 10% 12 - 13%	10.2% 12.7%	
RBIS	3 - 5%	4.0%	8.5 - 9.5% 13.5 - 14.5%	6.3% 11.7%	
Other specialty converting	5 - 8%	5.2%	> 5% > 10%	(11.1%) <i>(5.6%)</i>	

(1) Excluding restructuring charges and other items (see Appendix for reconciliation to GAAP measures).

(2) Adjusted to reflect new segment reporting and classification of DES as discontinued operations. Prior to the realignment and reclassification of DES, adjusted operating margin targets were 8.5 - 9.5% for PSM, 8 - 9% for RBIS, and > 5% for other speciality converting, adjusted EBITDA margin targets were 11.5 - 12.5% for PSM, 13 - 14% for RBIS, and > 10% for other speciality converting

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Company Results vs Long-Term Targets (2012 –2015)

	FROM C		RATIONS
	2012 – 2015 TARGETS ⁽¹⁾	2012 / 2013 ⁽²⁾	2014 OUTLOOK
Organic Sales Growth	3% – 5%	4.3%	3% – 5% 3- <i>YR CA</i> GR - 4%
Adjusted Net Income Growth	10% – 15%	25.5%	4% - 16% 3. <i>YR CAGR = 18% - 22%</i>
Adjusted EPS Growth	15% – 20%+	29.4%	8% - 19% 3-YR CAGR = 22% - 26%
Annual Free Cash Flow	\$300 mil.+	\$317 mil. (2-yr avg.)	\$300 mil.+
Net Debt to Adjusted EBITDA	1.7x to 2.0x	1.5x (2013 avg.)	< 2x

(1) All percentages reflect four-year compound annual growth rates, with 2011 as the base period.

(2) All percentages reflect two-year compound annual growth rates, with 2011 as the base period (see Appendix, as well as attachments A-2 through A-5 to news release dated January 31, 2014, for reconciliations to GAAP Measures).

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2014 EPS Guidance

Reported EPS	\$2.60 - \$2.90
Add Back:	
Estimated restructuring costs and other items	~ \$0.30
Adjusted EPS (non-GAAP)	\$2.90 - \$3.20

Contributing Factors to 2014 EPS Guidance

- > Organic sales growth of 3% to 5% (excludes benefit of extra week of sales)
 - » 53 weeks in 2014 fiscal year; 14 weeks in fourth quarter (adding ~1% to reported sales growth, slight impact to earnings, modest headwind to free cash flow)
 - » At recent rates, currency translation has modest negative impact to reported sales growth and EBIT
- > Tax rate comparable to 2013
- > Capital expenditures (including IT) of ~\$185 mil. and cash restructuring costs of ~\$45 mil.
- > Average shares outstanding (assuming dilution) of ~97 mil.
- > Free cash flow in excess of \$300 mil.

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Appendix: Reconciliation of Non-GAAP Financial Measures

(Organic Sales Growth)

A		(\$ in millions) 2012	004.0	2-Yr
Avery Dennison	2011 \$5,844.9	\$5,863.5	2013 \$6,140.0	CAGE
	\$5,044.9	3.8%	4.8%	4.3%
Organic sales change				4.376
Foreign currency translation		-3.4%	0.1%	
Reported sales change*		0.3%	4.7%	
Pressure-Sensitive Materials	2011	2012	2013	
Netsales	\$4,261.0	\$4,257.6	\$4,455.0	
Organic sales change		4.1%	4.7%	4.4%
Foreign currency translation		-4.2%	0.1%	
Reported sales change*		-0.1%	4.6%	
Retail Branding & Information Solutions	2011	2012	2013	
Net sales	\$1,510.1	\$1,535.0	\$1,611.1	
Organic sales change		3.1%	4.9%	4.0%
Foreign currency translation		-1.5%	0.0%	
Reported sales change*		1.6%	5.0%	
Other Specialty Converting	2011	2012	2013	
Net sales	\$73.8	\$70.9	\$73.9	
Organic sales change		2.9%	7.6%	5.2%
Foreign currency translation		-3.9%	1.4%	
Product Line Exit		-2.9%	-4.8%	
Reported sales change*		-3.9%	4.2%	

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Appendix: Reconciliation of Non-GAAP Financial Measures

(EBIT/EBITDA Margins by Segment, Full-Year 2013).

(\$ in millions)	Pressure- Sensitive Materials	Retail Branding & Information Solutions	Other Specialty Converting
Net sales	\$4,455.0	\$1,611.1	\$73.9
Earnings before interest and taxes ("EBIT"), as reported	\$442.8	\$81.7	(\$8.3)
EBIT margin, as reported	9.9%	5.1%	-11.2%
Non-GAAP Adjustments: Restructuring costs: Severance and related costs Asset impairment, lease and other contract cancellation charges Other items	\$7.0 \$3.8	\$19.9 \$8.6 (\$8.5)	\$0.1
Adjusted EBIT (non-GAAP)	\$453.6	\$101.7	(\$8.2)
Adjusted EBIT margin (non-GAAP)	10.2%	6.3%	-11.1%
Depreciation and amortization*	\$113.4	\$86.7	\$4.1
Adjusted earnings before interest, taxes, depreciation & amortization ("EBITDA")	\$567.0	\$188.4	(\$4.1)
Adjusted EBITDA margin	12.7%	11.7%	- 5.6%

* Reflects total company depreciation and amortization expense, including indirect depreciation and amortization (primarily software) allocated to the segments and other speciality converting on a percentage of sales basis



Appendix: Reconciliation of Non-GAAP Financial Measures

(Net Income and EPS)

Net Income				
(\$ in millions)		2012	2013	2-Yr <u>CAG</u> F
As reported net income from continuing operations	\$141.7	\$157.6	\$244.3	
Non-GAAP adjustments, net of tax:				
Restructuring costs and other items	\$28.9	\$45.0	\$24.3	
Adjusted non-GAAP net income from continuing operations	\$170.6	\$202.6	\$268.6	25.5%
EPS				2-Yr
EPS				2-Yr
	2011	2012	2013	2-Yr CAGF
As reported net income per common share from continuing	<u>2011</u> \$1.33	2012 \$1.52	2013 \$2.44	
As reported net income per common share from continuing operations, assuming dilution Non-GAAP adjustments per common share, net of tax:		\$1.52	\$2.44	
As reported net income per common share from continuing operations, assuming dilution	\$1.33			

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Appendix: Reconciliation of Non-GAAP Financial Measures

(Net Debt to Adjusted EBITDA)

(S in millions)	1012	2Q12	3Q12	4Q12	1013	2013	3Q13	4Q13	4-pt Avg.
Netsales	\$1,443.0	\$1,490.4	\$1,447.0	\$1,483.1	\$1,498.9	\$1,552.3	\$1,504.9	\$1,583.9	
Earnings before interest and taxes ("EBIT"), as reported	\$80.6	\$92.2	\$72.5	\$65.2	\$93.3	\$124.3	\$90.8	\$113.7	
Non-GAAP Adjustments:									
Restructuring costs:									
Severance and related costs	\$5.7	\$9.8	\$17.6	\$16.2	\$6.8	\$5.4	\$8.7	\$6.3	
Asset impairment, lease and other contract cancellation charges	\$1.5	\$0.4	\$1.5	\$3.1	\$1.3	\$2.4	\$8.0	\$1.4	
Other items	\$0.4	\$1.0	\$2.8	\$8.8	(\$0.6)	(\$8.1)	\$9.0	(\$4.0)	
Adjusted EBIT (non-GAAP)	\$88.2	\$103.4	\$94.4	\$93.3	\$100.8	\$124.0	\$116.5	\$117.4	
Depreciation	\$40.5	\$34.7	\$36.0	\$38.9	\$35.0	\$34.5	\$35.4	\$30.7	
Amortization	\$18.9	\$16.5	\$17.5	\$17.8	\$16.5	\$17.3	\$17.0	\$18.2	
Adjusted semings before interest, taxes, depreciation &									
amortization ("EBITDA")	\$147.6	\$154.8	\$147.9	\$149.8	\$152.3	\$175.8	\$168.9	\$166.3	
Total Debt as of Dec. 28, 2013	\$1,316.9	\$1,374.7	\$1,377.1	\$1,222.4	\$1,357.4	\$1,389.6	\$1,065.7	\$1,027.5	
Less: Cash and cash equivalents as of Dec. 28, 2013	\$190.7	\$161.4	\$190.7	\$235.4	\$207.7	\$211.6	\$309.6	\$351.6	
Net Debt	\$1,126.2	\$1,213.3	\$1,186.4	\$967.0	\$1,149.7	\$1,178.0	\$756.1	\$675.9	
Net Debt to Adjusted LTM* EBITDA (Non-GAAP)					1.9	1.9	1.2	1.0	1.5

"LTM - Last twolve months





Inspired Brands. Intelligent World."

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	ĺ		Publication	1
Patent Number	Title	Filing Date	Date	Status
US20230291462A1	Laser shock peening system and method	4-Oct-22	19-Oct-23	New Application
US20230348354A1	Laser shock peening system and method	20-Dec-22		New Application
	· · · · · · · · · · · · · · · · · · ·			
Patent Number	Title	Filing Date	Issue Date	Assignee
5,463,300	Method of inspecting bonded article	10-Oct-95		LSP Technologies,
	Method and apparatus for laser bond			
5,657,697	inspection	9-May-96	12-Aug-97	LSP Technologies,
	Method and apparatus for laser bond			I SP Technologies
6,191,384	inspection of hidden surfaces	11-Apr-95	13-Feb-01	LSP Technologies,
(200 260	Method and apparatus for laser bond	12.2400	10 5 01	LSP Technologies,
0,288,308	inspection	12-Mar-98		
6 578 763	Method and apparatus for laser bond inspection of curved surfaces	11-Jan-01	12_Mar_02	LSP Technologies,
0,028,000	Method and apparatus for laser bond	11-341-01	12-14141-02	
	inspection with ultrasonic surface motion			LSP Technologies,
6,867,390	-	3-May-01	15-Mar-05	g,
	Laser bond inspection method and			T CD T
7,770,454	apparatus	14-Nov-06	10-Aug-10	LSP Technologies,
8,132,460	Laser induced bond delamination	5-Jul-11	13-Mar-12	LSP Technologies,
	Apparatus and method for non-destructive			I SP Technologies
8,156,811		20-Oct-06		LSP Technologies,
8,225,664	Lamb waves for laser bond inspection	17-Oct-07	24-Jul-12	LSP Technologies,
	Temporal pulse shaping for laser bond	22.26 16	30 D 16	LSP Technologies,
	inspection	23-May-15		
11,143,629	Laser bond inspection calibration system	13-Nov-19		LSP Technologies,
11 273 521	Method and apparatus for laser shock peening ballistic armor	31-Mar-16	20-Dec-16	LSP Technologies,
¥ داد لې کې ار د داو \$ \$	Temporal pulse shaping for laser shock	<u></u>	20 200 10	
	peening, laser bond inspection, and other			LSP Technologies,
11,301,314	laser applications	26-Apr-19	31-Jan-23	
			Publication	
Patent Number	Title	Filing Date	Date	Status
US20230355740A1	Laser bond inspection system and method	30-Dec-22	16-Nov-23	New Application
	1	1	Publication	1
Patent Number	Title	Filing Date	Date	Status
US20230291462A1	Laser shock peering system and method	4-Oct-22		New Application
US20230328728A1	Laser shock peening system and method	2-Dec-22		New Application
US20230329102A1	Laser shock peening system and method	2-Dec-22		New Application
	Laser shock peening system and method	7-Dec-22		New Application
US20230334014A1		·		
US20230348354A1	Laser shock peening system and method	20-Dec-22 22-Dec-22		New Application
US20230349895A1	Laser shock peening system and method			
US20230357972A1	Laser shock peening system and method	5-Jan-2		New Application
US20230360994A1	Laser shock peening system and method	9-Jan-23		New Application
US20230371633A1	Laser shock peening system and method	20-Jan-23		New Application
US20230376888A1	Laser shock peening system and method	24-Jan-23		New Application
US20230389300A1	Laser shock peening system and method	2-Feb-23		New Application
US20230392033A1	Laser shock peening system and method	6-Feb-2	3] 30-Nov-2	New Application

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			Publication	
Patent Number		Filing Date	Date	Status
US20230291462A1	Laser shock peening system and method	4-Oct-22		New Application
US20230329102A1	Laser shock peening system and method	2-Dec-22 7-Dec-22		New Application
US20230334014A1	Laser shock peening system and method			New Application
US20230349895A1	Laser shock peening system and method	22-Dec-22		New Application
US20230357972A1	Laser shock peering system and method	5-Jan-23		New Application
US20230360994A1	Laser shock peening system and method	9-Jan-23		New Application
US20230371633A1	Laser shock peening system and method	20-Jan-23		New Application
US20230376888A1	Laser shock peening system and method	24-Jan-23		New Application
US20230389300A1	Laser shock peening system and method	2-Feb-23		New Application
US20230392033A1	Laser shock peening system and method	6-Feb-23	30-Nov-23	New Application
	Assignees			
US20230291462A1	LSP Technologies, Inc. and General Motors I	LC		
US20230329102A1	LSP Technologies, Inc. and Pratt & Whitney			
US20230334014A1	LSP Technologies, Inc. and Rolls-Royce plc			
US20230349895A1	LSP Technologies, Inc. and Safran Aircraft E	ngines		
US20230357972A1	LSP Technologies, Inc. and Siemens AG			
US20230360994A1	LSP Technologies, Inc. and Mitsubishi Heav	y Industries, Lt	đ	
US20230371633A1	LSP Technologies, Inc. and Kawasaki Heavy	Industries, Ltd		
US20230376888A1	LSP Technologies, Inc. and Honda Motor Co	, Ltd.		
US20230389300A1	LSP Technologies, Inc. and Toyota Motor C	orporation		
US20230392033A1	LSP Technologies, Inc. and Hyundai Motor	Company		
PENDING-BOND				
Patent Number	Title	Filing Date	Publication Date	Assignees
US20230355740A1	Laser bond inspection system and method	30-Dec-22		LSP Technologies,
				and General Motors
			Publication	
Patent Number	Title	Filing Date	Date	Status
US20230348354A1	Laser shock peening system and method	20-Dec-22	8-Nov-23	New Application
US20230349895A1	Laser shock peening system and method	22-Dec-22	19-Oct-23	New Application
US20230357972A1	Laser shock peening system and method	5-Jan-23	26-Oct-23	New Application
US20230360994A1	Laser shock peening system and method	9-Jan-23	2-Nov-23	New Application
US20230371633A1	Laser shock peening system and method	20-Jan-23	9-Nov-23	New Application
US20230376888A1	Laser shock peening system and method	24-Jan-23	16-Nov-23	New Application
US20230389300A1	Laser shock peering system and method	2-Feb-23	23-Nov-23	New Application
US20230392033A1	Laser shock peening system and method	6-Feb-23		New Application
	Assignees	1	, 	1
US20230348354A1	LSP Technologies, Inc. and Pratt & Whitne	v		
US20230349895A1	LSP Technologies, Inc. and Rolls-Royce plo		-	
US20230349895A1	LSP Technologies, Inc. and Siemens AG	·	+	
	LSP Technologies, Inc. and Mitsubishi Hea	UV Inductries	tđ	
US20230360994A1				
US20230371633A1	LSP Technologies, Inc. and Kawasaki Heav		u. T	
US20230376888A1	LSP Technologies, Inc. and Honda Motor C			
US20230389300A1	LSP Technologies, Inc. and Toyota Motor			
US20230392033A1	LSP Technologies, Inc. and Hyundai Motor	company	1	1

Patent Number	Title	Filing Date	Issue Date	Defendant
6,191,385	Laser bond inspection system and method	11-Apr-95	13-Feb-01	Continuum Electro Optics, Inc.
	Court	Case Number	Outcome	
	United States District Court for the Northern District of Ohio	2:08-cv-0039	LSP Technolo	gies, Inc. prevailed.
Trademark	Filing Date	Registration Date	Status	
	20-Aug-05		[
LSP Technologies Laser Shock Peening	20-Aug-05 20-Aug-05			
Laser Shock Feeling	20Aug-05	51-141ay-00	ACUVC	
Laser Bond Inspection	20-Aug-05	31-May-06	Active	
LSP	18-Sep-07	10-Jun-08	Active	
LSP Laser Shock				
Peening	18-Sep-07	10-Jun-08	Active	
LSP Laser Bond				
Inspection	18-Sep-07	10-Jun-08	Active	

but this list is lin	uited to trademarks filed and owned in th	ne United States.		
Patents in other	countries			
Country	Patent Number	Title	Filing Date	Publication Date
		Laser shock		
		processing of	4 4	18-Feb-0
Australia	AU2003222391B2	metal surfaces	4-Aug-03	18-Feb-0.
		Laser shock		
		processing		
		method and		
Canada	CA2479693A1	apparatus	5-Aug-03	17-Feb-05
		Laser shock		
		processing	1	
		method and		
China	ZL200380101551.3	apparatus	4-Aug-03	15-Feb-00

LSP Technologies, Inc. also owns a number of trademarks in other countries, but this list is limited to trademarks filed a

Australia		
Canada		
China		
Europe		
Japan		
Korea		
Mexico		}

New Zealand				
Russia				
Singapore				
Taiwan				
IN USA				
Patent Number	Title	Filing Date	Issue Date	Status
4,401,477	Laser shock processing	1-Jui-78	30-Aug-83	Granted
	Laser shock processing of aluminum			
4,853,560	components	31-Jul-87	8-Aug-89	Granted
	Laser shock processing method and			
5,007,799	apparatus	28-Oct-88		
5,072,991	Sure sleeves for laser shock processing	17-Oct-90	3-Dec-91	Granted
	Method and apparatus for laser shock			
5,127,019	peening of workpieces	3-May-90	/~Jul-92	Granted
	Laser shock peening process for improving			
5 737 080	fatigue life of components having a non- uniform surface	3-May-96	1-Aug-93	Granted
۵۷ وړع کرمې ک	Method of laser shock peening and	<u></u>	11116.55	
5,268,565	monitoring the resulting surface finish	29-Apr-96	7-Dec-94	Granted
	Method of laser shock peening with pulse-			
5,309,282	width modulation	17-Sep-92	9-May-95	Granted
······································	Laser shock peening apparatus with			
5,384,573	multiple beam sources	21-Jul-94	31-Jan-95	Granted
	Method of laser shock peening of			
	components having a thin, pre-existing	11. 1	14 5-1-06	C
5,411,652	surface layer	11-Apr-95	14-Feb-96	Granted
	Laser shock processing apparatus with			
5,442,124	multiple beam sources and beam splitting	6-Aug-96	8-Aug-95	Granted
- y y T 7 40 y A 40 T	Laser shock processing apparatus with			
	means for monitoring laser beam			
5,450,141	characteristics	17-Sep-92	19-Sep-95	Granted
6,191,385	Laser bond inspection system and method	11-Apr-95	13-Feb-01	Granted
11,433,476	Laser shock peening apparatus	23-Apr-19	6-Sep-22	Granted
<u></u>			Publication	
Patent Number	Title	Filing Date	Date	Status
US20230355740A1	Laser bond inspection system and method	30-Dec-22	16-Nov-23	New Application
US20230349895A1	Laser shock peening system and method	22-Dec-22	19-Oct-23	New Application
US20230348354A1	Laser shock peening system and method	20-Dec-22	8-Nov-23	New Application
US20230357972A1	Laser shock peening system and method	5-Jan-23	26-Oct-23	New Application
US20230360994A1	Laser shock peening system and method	9-Jan-23	2-Nov-23	New Application
US20230371633A1	Laser shock peening system and method	20-Jan-23	9-Nov-23	New Application
	<u> </u>	1	1	

COUNTRIES				
Country	Patent Number	Title	Filing Date	Publication Date
		Laser shock		
		processing of		
Australia	AU2003222391B2	metal surfaces	4-Aug-03	18-Feb-0
nan en distan distanta alla an alla distanta di sud		Laser shock		
		processing		
		method and		
Canada	CA2479693A1	apparatus	5-Aug-03	17-Feb-0
		Laser shock	1	
		processing		
		method and		
China	ZL2003\$0101551.3	apparatus	4-Aug-03	15-Feb-00
		Laser shock		
		processing method and		
	EP149303981		5-Aug-03	14.Feb-0
Ешоре	LF 147303701	apparatus Laser shock	2-2408-03	
		processine		
		method and		
Japan	JP2005144487A	apparatus	4-Aug-03	22-Feb-0
		Laser shock	1	
		processing		
		method and	1	
Korea	KR20050012565A	spparatus	4-Aug-03	15-Feb-0
		Laser shock		
		processing		
		method and		
Mexico	MXPA03004708A	apparatus	5-Aug-03	14-Feb-0
		Laser shock		
		processing		
		method and		
New Zealand	NZ538905A	apparatus	5-Aug-03	14-Feb-0
		Laser shock		
		processing	1	
		method and		
Russia	RU2337155C1	apparatus	5-Aug-03	14-Feb-0
		Laser shock	1	
		processing	1	
e :	SG70367A1	method and	J-Aug-03	14-Feb-0
Singapore	1201020/AL	apparatus Laser shock	1	14-5 60-4

Mexico	LSP	8-Mar-03	20-Sep-03	Registered
New Zealand	LSP	9-Mar-03	19-Sep-03	Registered
Russia	LSP	10-Mar-03	18-Sep-03	Registered
Singapore	LSP	11-Mar-03	17-Sep-03	Registered
Taiwan	LSP	12-Mar-03	16-Sep-03	Registered
ALL KIND				· · · · · · · · · · · · · · · · · · ·
Patent Number	Title	Filing Date	Issue Date	Status
4.401.477	Laser shock processing	1-Jul-78	30-Aug-83	Granted
	Laser shock processing of aluminum			
4,853,560	components	31-Jul-87	8-Aug-89	Granted
	Laser shock processing method and			
5,007,799	apparatus	28-Oct-88	9-Apr-91	Granted
	Sure sleeves for laser shock processing	17-Oct-90		
	Method and apparatus for laser shock			
5,127,019	peening of workpieces	3-May-90	7-Jul-92	Granted
	Laser shock peening process for improving			
	fatigue life of components having a non-			
5,232,980	uniform surface	3-May-96	1-Aug-93	Granted
****	Method of laser shock peening and			
5,268,565	monitoring the resulting surface finish	29-Apr-96	7-Dec-94	Granted
******	Method of laser shock peening with pulse-			
5,309,282	width modulation	17-Sep-92	9-May-95	Granted
	Laser shock peening apparatus with			
5,384,573	multiple beam sources	21-Jul-94	31-Jan-95	Granted
	Method of laser shock peening of			
	components having a thin, pre-existing		1	
5,411,652	surface layer	11-Apr-95	14-Feb-96	Granted
	Laser shock processing apparatus with			
	multiple beam sources and beam splitting			
5,442,124	optics	6-Aug-96	8-Aug-95	Granted
	Laser shock processing apparatus with			
	means for monitoring laser beam			
5,450,141	characteristics	17-Sep-92	19-Sep-95	Granted
6,191,385	Laser bond inspection system and method	11-Apr-95	13-Feb-01	Granted
11,433,476	Laser shock peening apparatus	23-Apr-19	6-Sep-22	Granted

Title	Publication Numbers	Current Standardized Assignees	Legal Status	Earliest Patent Priority Date	First Publication Date	Grant Date
(US20230330772) Laser shock peening apparatus	US20230330772	LSP TECHNOLOGIES	PENDING	2020-07-22	(US20230330772) 2023-10-19	
(EP4185435) Laser shock peening apparatus	EP4185435	LSP TECHNOLOGY	PENDING	2020-07-22	(EP4185435) 2023-05-31	
(US20230098272) Method and apparatus for pulsed laser beam control in laser shock peening process	US20230098272	LSP TECHNOLOGIES	PENDING	2020-03-09	(US20230098272) 2023-03-30	
(WO202339477) An integrated system and method for in-situ laser peening of a three- dimensional printed part	WO2023/039477	LSP TECHNOLOGY	PENDING	2021-09-08	(WO202339477) 2023-03-16	
(WO2022203971) Method and apparatus for in-situ detection of damage occurring to an optical fiber or an optical mirror	WO2022/203971 WO2022/203971	LSP TECHNOLOGY	LAPSED	2021-03-23	(WO2022203971) 2022-09-29	
(US20220205060) System and method for modeling a part and using laser peening to form or correct the part	US20220205060	LSP TECHNOLOGIES	PENDING	2016-04-11	(US20220205060) 2022-06-30	
(RU2020136111) Latent impact laser hardening device	RU2020136111	LSP TECHNOLOGIES	PENDING	2018-04-23	(RU2020136111) 2022-05-05	
(WO202293752) System and method for in- process corrosion inhibition in laser peening	WO2022/093752	LSP TECHNOLOGY	LAPSED	2020-10-26	(WO202293752) 2022-05-05	
(WO202220565) Laser shock peening apparatus	WO2022/020565	LSP TECHNOLOGY	LAPSED	2020-07-22	(WO202220565) 2022-01-27	
(WO202219906) Method and system for use in laser shock peening and laser bond inspection process	WO2022/019906	LSP TECHNOLOGY	LAPSED	2020-07-22	(WO202219906) 2022-01-27	
(US20220003359)	US20220003359	LSP INDUSTRIES	PENDING	2020-07-02	(US20220003359) 2022-01-06	
Lubricating system (US20210372881) Systems, methods and apparatuses for launching laser beams into multiple fibers and/or combining beams	US20210372881	LSP TECHNOLOGY	PENDING	2018-10-01	(US20210372881) 2021-12-02	
(JP2021531168) Apparatus for laser peening hidden surfaces	JP2021531168	L SPE TECHNOLOGIES	PENDING	2018-04-23	(JP2021531168) 2021-11-18	
(IN202027050785) Apparatus for laser peening hidden surfaces	IN202027050785	LSP TECHNOLOGIES	PENDING	2018-04-23	(IN202027050785) 2021-10-08	
(WO2021183402) Method and apparatus for pulsed laser beam control in laser shock peening process	WO2021/183402	LSP TECHNOLOGY	LAPSED	2020-03-09	(WO2021183402) 2021-09-16	

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processes						
(EP3755821) Apparatus for laser	EP3755821 EP3755821	LSP TECHNOLOGY	PENDING	2018-04-23	(EP3755821) 2020-12-30	
peening hidden surfaces (IL-278049) Apparatus for laser	il.278049	LSP TECHNOLOGY	GRANTED	2018-04-23	(IL-27804 9)	(IL-278049)
peening hidden surfaces	16278049			2010-07-23	2020-11-30	2020-11-30
(SG11202009738P) Apparatus for laser peening hidden surfaces	SG11202009738P	LSP TECHNOLOGIES	PENDING	2018-04-23	(SG11202009738P) 2020-10-29	
(US20200346301) Method and system for use in laser shock peening and laser bond inspection process	US20200346301	LSP TECHNOLOGIES	PENDING	2015-01-09	(US20200346301) 2020-11-05	
(CA3096275) Apparatus for laser peening hidden surfaces	CA3096275	LSP TECHNOLOGIES	PENDING	2018-04-23	(CA3096275) 2019-10-31	
(US6144012) Efficient laser peening	US6144012	LSP TECHNOLOGIES	LAPSED	1997-11-05	(US6144012) 2000-11-07	(US6144012) 2000-11-07
(WO202072512) Systems, methods and apparatuses for launching laser beams into multiple fibers and/or combining beams	WO2020/072512	LSP TECHNOLOGY	LAPSED	2018-10-01	(WO202072512) 2020-04-09	
(EP3588698) Mଧ୍ୟti-stage amplifier, method and apparatus for use in laser shock peening processes	EP3588698 EP3588698	LSP TECHNOLOGY	GRANTED	2015-01-09	(EP3588698) 2020-01-01	(EP3588698) 2023-09-06
(WO2019209786) Apparatus for laser peening hidden surfaces	WO2019/209786	LSP TECHNOLOGY	LAPSED	2018-04-23	(WO2019209786) 2019-10-31	
(US11433476) Apparatus for laser peening hidden surfaces	US11433476 US20190321911	LSP TECHNOLOGIES	GRANTED	2018-04-23	(US11433476) 2019-10-24	(US11433476) 2022-09-06
(US10365479) Protection of laser bond inspection optical components	US10365479 US20180321485	LSP TECHNOLOGIES	GRANTED	2013-11-25	(US10365479) 2018-11-08	(US10365479) 2019-07-30
(JP6772147) Method and apparatus for use in a laser impact peening process	JP6772147 JP2018508981	L SPE TECHNOLOGIES	GRANTED	2015-01-09	(JP6772147) 2018-03-29	(JP6772147) 2020-10-21
(US10819079) Method and apparatus for use in laser shock peening	US10819079 US20180001417	LSP TECHNOLOGIES	GRANTED	2015-01-09	(US10819079) 2018-01-04	(US10819079) 2020-10-27
(US10232470) Temporal pulse shaping for laser shock peening	US10232470 US20170334018	LSP TECHNOLOGIES	LAPSED	2014-05-22	(US10232470) 2017-11-23	(US10232470) 2019-03-19
(EP3242768) Method and apparatus for use in laser shock peening processes	EP3242768 EP3242768 EP3242768 EP3242768 EP3242768	LSP TECHNOLOGIES	GRANTED	2015-01-09	(EP3242768) 2017-11-15	(EP3242768) 2019-09-11
(IN-368274) Method and apparatus for use in laser shock peening processes	IN368274 IN201717024612	LSP TECHNOLOGIES	GRANTED	2015-01-09	(IN-368274) 2017-10-27	(IN-368274) 2021-06-01

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(US20210083446)

Method and apparatus for

use in laser shock peening (JP2021010017)

Method and apparatus for

use in laser shock peening processes

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14				
	LAPSED	2000-06-09	(US7776165) 2010-08-17	(US7776165) 2010-08-17

(US11273521) Method and apparatus for laser shock peening ballistic armor	US11273521 US20170291256	LSP TECHNOLOGIES	GRANTED	2016-04-11	(US11273521) 2017-10-12	(US11273521) 2022-03-15
(CA2973382) Method and apparatus for use in laser shock peening processes	CA2973382	LSP TECHNOLOGIES	PENDING	2015-01-09	(CA2973382) 2016-07-14	
(WO2016112301) Method and apparatus for use in laser shock peening processes	WO2016/112301	LSP TECHNOLOGIES	LAPSED	2015-01-09	(WO2016112301) 2016-07-14	
(US9525261) Temporal pulse shaping for laser bond inspection	US9525261 US20160197448	LSP TECHNOLOGY LSPT TECHNOLOGY	LAPSED	2014-05-22	(US9525261) 2016-07-07	(US9525261) 2016-12-20
(US9878398) Automated dynamic laser peening system	US9878398 US20160136757	LSP TECHNOLOGIES	GRANTED	2014-11-13	(US9878398) 2016-05-19	(US9878398) 2018-01-30
(US9227268) Methods, systems, and apparatuses for laser shock peening metal materials	US9227268	LSP TECHNOLOGIES	LAPSED	2007-04-13	(US9227268) 2016-01-05	(US9227268) 2016-01-05
(US9744618) Temporal pulse shaping for laser shock peening	US9744618 US20150336208	LSP TECHNOLOGIES	GRANTED	2014-05-22	(US9744618) 2015-11-26	(US9744618) 2017-08-29
(US10048494) Protection of laser bond inspection optical components	US10048494 US20150143916	LSP TECHNOLOGIES	GRANTED	2013-11-25	(US10048494) 2015-05-28	(US10048494) 2018-08-14
(US20150128717) Automated dynamic laser bond inspection system	US20150128717	LSP TECHNOLOGIES	LAPSED	2013-11-13	(US20150128717) 2015-05-14	
(US9857288) Laser bord inspection with compact surface motion sensor	US9857288 US20150122046	LSP TECHNOLOGIES	GRANTED	2013-11-01	(US9857288) 2015-05-07	(US9857288) 2018-01-02
(US8785814) Optic protection via stagnant liquid film	US8785814	LSP TECHNOLOGIES	LAPSED	2009-05-05	(US8785814) 2014-07-22	(US8785814) 2014-07-22
(US9201017) Photon doppler velocimetry for laser bond inspection	US9201017 US20140049773	LSP TECHNOLOGIES	GRANTED	2012-08-16	(US9201017) 2014-02-20	(US9201017) 2015-12-01
(US9144861) Apparatus for laser peening hidden surfaces	US9144861 US20120325788	LSP TECHNOLOGIES	GRANTED	2011-06-03	(US9144861) 2012-12-27	(US9144861) 2015-09-29
(US20110126605) Bend bar quality control method for laser shock peening	US20110126605	LSP TECHNOLOGIES	LAPSED	2003-12-10	(US20110126605) 2011-06-02	
(US20110132886) Laser Peening Process and Apparatus Using a Liquid Erosion-Resistant Opaque Overlay Coating	US20110132886	LSP TECHNOLOGIES	LAPSED	2003-09-02	(US20110132886) 2011-06-09	
(US8132460) Laser induced bond delamination	US8132460	LSP TECHNOLOGIES	GRANTED	2004-09-27	(US8132460) 2012-03-13	(US8132460) 2012-03-13
(US7735377) Laser bond inspection using annular laser beam	US7735377	BOEING LSP TECHNOLOGIES	LAPSED	2007-10-17	(US7735377) 2010-06-15	(US7735377) 2010-06-15
(US7776165) Method of modifying a workpiece following laser shock processing	US7776165	LSP TECHNOLOGIES	LAPSED	2000-06-09	(US7776165) 2010-08-17	(US7776165) 2010-08-17

(USRE43176)			l			
Laser peening process and		160	l.		(UCDE43176)	(USEE 43176)
apparatus using a liquid	USRE43176	LSP TECHNOLOGIES	LAPSED	2003-09-02	(USRE43176) 2012-02-14	(USRE43176) 2012-02-14
erosion-resistant opaque		TECHNOLOGIES			2012-02-14	2012-02-14
overlay coating						
(US7861573)		LSP			(US7861573)	(US7861573)
Laser shock induced	US7861573	TECHNOLOGIES	LAPSED	2007-11-28	2011-01-04	2011-01-04
spallation					2011 01 04	
(US20090108103)					(US20090108103)	
Needle Valve Assembly for	US20090108103	LSP INDUSTRIES	LAPSED	2007-10-30	2009-04-30	
Spray System					2009-04-30	
(US8225664)		BOEING			(US8225664)	(US8225664)
Lamb waves for laser bond	US8225664	LSP	LAPSED	2007-10-17	2012-07-24	2012-07-24
inspection		TECHNOLOGIES			2012 07 24	
(US7775122)		LSP			(US7775122)	(US7775122)
Tape overlay for laser	US7775122	TECHNOLOGIES	GRANTED	2007-10-17	2010-08-17	2010-08-17
bond inspection					2010 00 1/	
(US7509876)		BOEING			(US7509876)	(US7509876)
Laser bond inspection	US7509876	LSP	GRANTED	2007-10-17	2009-03-31	2009-03-31
using annular laser beam		TECHNOLOGIES				
(U\$7868268)						
Laser peening process and		LSP			(US7868268)	(US7868268)
apparatus using a liquid	US7868268	TECHNOLOGIES	LAPSED	2003-09-02	2011-01-11	2011-01-11
erosion-resistant opaque						
overlay coating						
(US20090158797)		LSP			(US20090158797)	
Laser shock processed	US20090158797	TECHNOLOGIES	LAPSED	2006-01-12	2009-06-25	
pilger dies			l			
(US8156811)	US8156811	LSP			(US8156811)	(US8156811)
Apparatus and method for	US20080257048	TECHNOLOGIES	GRANTED	2004-09-15	2008-10-23	2012-04-17
non-destructive testing						
(US7470335)					(1107 (7000))	(1)(7)(7)(7)(7)(7)
Method of modifying a	US7470335 LSP	LAPSED	APSED 2000-06-09	(US7470335) 2005-09-29	(US7470335) 2008-12-30	
workpiece following laser	US20050211343	TECHNOLOGIES			2005-09-29	2008-12-30
shock processing						
(US7906745)	1107000745	100			(US7906745)	(US7906745)
Bend bar quality control	U\$7906745	LSP	LAPSED	2003-12-10	2006-02-02	2011-03-15
method for laser shock	US20060021409	TECHNOLOGIES			2000-02-02	2011-03-13
peening						
(US7770454)	UC77704E4	LSP			(US7770454)	(US7770454)
Laser system and method	US7770454 US20050120803	TECHNOLOGIES	GRANTED	2003-09-26	2005-06-09	2010-08-10
for non-destructive bond	0320030120805	TECHNOLOGIES			2003-00-03	2010-00-10
detection and evaluation (US7321105)				<u> </u>		
Laser peening of dovetail	1					
	1					
clots by fiber actical and	US7321105	LSP	LAPSED	2003-02-21	(US7321105)	(US7321105)
slots by fiber optical and articulate arm beam	US7321105 US20040232125	LSP TECHNOLOGIES	LAPSED	2003-02-21	(US7321105) 2004-11-25	(US7321105) 2008-01-22
articulate arm beam			LAPSED	2003-02-21		, .
articulate arm beam delivery			LAPSED	2003-02-21		, .
articulate arm beam delivery (US6875953)	US20040232125	TECHNOLOGIES	LAPSED	2003-02-21	2004-11-25	2008-01-22
articulate arm beam delivery (US6875953) Method using laser shock	US20040232125 US6875953	LSP	LAPSED	2003-02-21	2004-11-25 (US6875953)	2008-01-22 (US6875953)
articulate arm beam delivery (US6875953) Method using laser shock processing to provide	US20040232125	TECHNOLOGIES			2004-11-25	2008-01-22
articulate arm beam delivery (US6875953) Method using laser shock	US20040232125 US6875953	LSP			2004-11-25 (US6875953)	2008-01-22 (US6875953)
articulate arm beam delivery (US6875953) Method using laser shock processing to provide improved residual stress profile characteristics	US20040232125 US6875953	LSP			2004-11-25 (US6875953)	2008-01-22 (US6875953)
articulate arm beam delivery (US6875953) Method using laser shock processing to provide improved residual stress profile characteristics (US7268317)	US20040232125 US6875953 US20040238509	LSP TECHNOLOGIES			2004-11-25 (US6875953) 2004-12-02	2008-01-22 (US6875953) 2005-04-05
articulate arm beam delivery (US6875953) Method using laser shock processing to provide improved residual stress profile characteristics	US20040232125 US6875953 US20040238509 US7268317	LSP TECHNOLOGIES LSP			2004-11-25 (US6875953) 2004-12-02 (US7268317)	2008-01-22 (US6875953) 2005-04-05 (US7268317)
articulate arm beam delivery (US6875953) Method using laser shock processing to provide improved residual stress profile characteristics (US7268317) Laser peening process and	US20040232125 US6875953 US20040238509	LSP TECHNOLOGIES	LAPSED	2002-07-29	2004-11-25 (US6875953) 2004-12-02	2008-01-22 (US6875953) 2005-04-05
articulate arm beam delivery (US6875953) Method using laser shock processing to provide improved residual stress profile characteristics (US7268317) Laser peening process and apparatus using a liquid erosion-resistant opaque	US20040232125 US6875953 US20040238509 US7268317	LSP TECHNOLOGIES LSP	LAPSED	2002-07-29	2004-11-25 (US6875953) 2004-12-02 (US7268317)	2008-01-22 (US6875953) 2005-04-05 (US7268317)
articulate arm beam delivery (US6875953) Method using laser shock processing to provide improved residual stress profile characteristics (US7268317) Laser peening process and apparatus using a liquid erosion-resistant opaque overlay coating	US20040232125 US6875953 US20040238509 US7268317	LSP TECHNOLOGIES LSP	LAPSED	2002-07-29	2004-11-25 (US6875953) 2004-12-02 (US7268317)	2008-01-22 (US6875953) 2005-04-05 (US7268317)
articulate arm beam delivery (US6875953) Method using laser shock processing to provide improved residual stress profile characteristics (US7268317) Laser peening process and apparatus using a liquid erosion-resistant opaque overlay coating (US20040226637)	US20040232125 US6875953 US20040238509 US7268317	LSP TECHNOLOGIES LSP TECHNOLOGIES	LAPSED	2002-07-29	2004-11-25 (US6875953) 2004-12-02 (US7268317) 2005-03-03	2008-01-22 (US6875953) 2005-04-05 (US7268317)
articulate arm beam delivery (US6875953) Method using laser shock processing to provide improved residual stress profile characteristics (US7268317) Laser peening process and apparatus using a liquid erosion-resistant opaque overlay coating	US20040232125 US6875953 US20040238509 US7268317	LSP TECHNOLOGIES LSP TECHNOLOGIES LSP	LAPSED	2002-07-29	2004-11-25 (US6875953) 2004-12-02 (US7268317) 2005-03-03 (US20040226637)	2008-01-22 (US6875953) 2005-04-05 (US7268317)
articulate arm beam delivery (US6875953) Method using laser shock processing to provide improved residual stress profile characteristics (US7268317) Laser peening process and apparatus using a liquid erosion-resistant opaque overlay coating (US20040226637) Method, system and	US20040232125 US6875953 US20040238509 US7268317 US20050045607	LSP TECHNOLOGIES LSP TECHNOLOGIES	LAPSED REVOKED	2002-07-29 2003-09-02	2004-11-25 (US6875953) 2004-12-02 (US7268317) 2005-03-03	2008-01-22 (US6875953) 2005-04-05 (US7268317)
articulate arm beam delivery (US6875953) Method using laser shock processing to provide improved residual stress profile characteristics (US7268317) Laser peening process and apparatus using a liquid erosion-resistant opaque overlay coating (US20040226637) Method, system and article employing laser shock processing of	US20040232125 US6875953 US20040238509 US7268317 US20050045607	LSP TECHNOLOGIES LSP TECHNOLOGIES LSP	LAPSED REVOKED	2002-07-29 2003-09-02	2004-11-25 (US6875953) 2004-12-02 (US7268317) 2005-03-03 (US20040226637)	2008-01-22 (US6875953) 2005-04-05 (US7268317)
articulate arm beam delivery (US6875953) Method using laser shock processing to provide improved residual stress profile characteristics (US7268317) Laser peening process and apparatus using a liquid erosion-resistant opaque overlay coating (US20040226637) Method, system and article employing laser	US20040232125 US6875953 US20040238509 US7268317 US20050045607	LSP TECHNOLOGIES LSP TECHNOLOGIES LSP	LAPSED REVOKED	2002-07-29 2003-09-02	2004-11-25 (US6875953) 2004-12-02 (US7268317) 2005-03-03 (US20040226637)	2008-01-22 (US6875953) 2005-04-05 (US7268317)

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apparatus using tailored laser beam spot sizes						
(US7752953) Method and system for neutralization of buried mines	US7752953 US20040200341	LSP TECHNOLOGIES	LAPSED	2003-03-12	(US7752953) 2004-10-14	(US7752953) 2010-07-13
(US6867390) Automated positioning of mobile laser peening head	US6867390 US20030217997	LSP TECHNOLOGIES	EXPIRED	2001-04-30	(US6867390) 2003-11-27	(US6867390) 2005-03-15
(US6841755) Overlay control for laser peening	US6841755 US20030213788	LSP TECHNOLOGIES	LAPSED	2001-01-23	(US6841755) 2003-11-20	(US6841755) 2005-01-11
(US6747240) UV curable overlays for laser peening	US6747240 US20040011774	LSP TECHNOLOGIES	LAPSED	2001-07-23	(US6747240) 2004-01-22	(US6747240) 2004-06-08
(US6752593) Articles having improved residual stress profile characteristics produced by laser shock peening	US6752593 US20030026700	LSP TECHNOLOGIES	LAPSED	2001-08-01	(US6752593) 2003-02-06	(US6752593) 2004-06-22
(US6759626) System for laser shock processing objects to produce enhanced stress distribution profiles	US6759626 US20030024904	LSP TECHNOLOGIES	LAPSED	2001-08-01	(US6759626) 2003-02-06	(US6759626) 2004-07-06
(US6664506) Method using laser shock processing to provide improved residual stress profile characteristics	US6664506 US20030024915	LSP TECHNOLOGIES	EXPIRED	2001-08-01	(US6664506) 2003-02-06	(US6664506) 2003-12-16
(US6756104) Surface finishes on laser rods and slabs for laser	US6756104 US20020110348	LSP TECHNOLOGIES	LAPSED	1998-04-21	(US6756104) 2002-08-15	(US6756104) 2004-06-29
peening systems (US6821345) Roller coater apparatus	US6821345 US20020073920		EXPIRED	1999-11-12	(US6821345) 2002-06-20	(US6821345) 2004-11-23
(US6521860) Beam path clearing for laser peening	US6521860 US20020008087	LSP TECHNOLOGIES	LAPSED	1999-02-19	(US6521860) 2002-01-24	(US6521860) 2003-02-18
(US6583384) UV curable overlays for laser shock processing	US6583384 US20030015508	LSP TECHNOLOGIES	LAPSED	2001-07-23	(US6583384) 2003-01-23	(US6583384) 2003-06-24
(US6554921) Quality control plasma monitor for laser shock processing	US6554921 US20010045416	LSP TECHNOLOGIES	LAPSED	1999-02-19	(US6554921) 2001-11-29	(US6554921) 2003-04-29
(US6539773) Shock pressure gauge for laser peening apparatus	US6539773 US20010042397	LSP TECHNOLOGIES	LAPSED	1999-11-19	(US6539773) 2001-11-22	(US6539773) 2003-04-01
(U36469275) Oblique angle laser shock processing	US6469275 US20020000428	LSP TECHNOLOGIES	EXPIRED	1999-01-20	(US6469275) 2002-01-03	(US6469275) 2002-10-22
(US6683976) Image processing for laser shock processing	US6683976 US20020021831	LSP TECHNOLOGIES	LAPSED	1998-04-08	(US6683976) 2002-02-21	(US6683976) 2004-01-27
(US6528763) Laser search peening for exfoliation corrosion detection	U\$6528763	LSP TECHNOLOGIES	LAPSED	2001-04-30	(US6528763) 2003-03-04	(US6528763) 2003-03-04
(US6548782) Overlay control for laser peening	US6548782 US20030038123	LSP TECHNOLOGIES	LAPSED	2001-01-23	(US6548782) 2003-02-27	(US6548782) 2003-04-15
(US6483578) Mechanical gauges for quality assurance of laser peening	US6483578	LSP TECHNOLOGIES	LAPSED	2000-06-12	(US6483578) 2002-11-19	(US6483578) 2002-11-19

/				r 1		1
(US6852179) Method of modifying a workpiece following laser	US6852179	LSP TECHNOLOGIES	LAPSED	2000-06-09	(US6852179) 2005-02-08	(US6852179) 2005-02-08
shock processing	·····					
(US6483076) Method of positioning a workpiece for optimal	US6483076	LSP TECHNOLOGIES	LAPSED	2000-05-02	(US6483076) 2002-11-19	(US6483076) 2002-11-19
processing						
(US6127649) Process chamber for laser	US6127649	LSP	EXPIRED	1997-12-30	(US6127649)	(US6127649)
peening	030127049	TECHNOLOGIES	CAPINED	1997-12-50	2000-10-03	2000-10-03
(US6462308)						
Utilizing altered vibration	US6462308	LSP TECHNOLOGIES	LAPSED	1999-11-23	(US6462308) 2002-10-08	(US6462308)
responses of workpieces,						2002-10-08
such as gas turbine engine blades						
(US6474135)						
Laser peening to provide	1156474125	LSP TECHNOLOGIES	LAPSED	1999-11-19	(US6474135) 2002-11-05	(US6474135) 2002-11-05
design credit for improved	US6474135					
fatigue properties						
(US6412331) Shock pressure gauge for	US6412331	LSP	LAPSED	1999-11-19	(US6412331)	(US6412331)
laser peening apparatus	000412331	TECHNOLOGIES	LAFSED	7332-77-73	2002-07-02	2002-07-02
(US6521044)						
Roller apparatus for	US6521044	LSP INDUSTRIES	EXPIRED	1999-11-12	(US6521044)	(US6521044)
applying lubricant to sheet	050521044			· · · · · · · · · · · · · · · · · · ·	2003-02-18	2003-02-18
metal stock (US6291794)					······	
Multiple beam time		LSP			(US6291794)	(US6291794)
sharing for a laser shock	US6291794	TECHNOLOGIES	EXPIRED	1999-10-19	2001-09-18	2001-09-18
peening apparatus						
(US6238187)		100				
Method using laser shock peening to process airfoil		LSP TECHNOLOGIES			(US6238187)	(US6238187)
weld repairs pertaining to	US6238187	UNITED	LAPSED	1999-10-14	2001-05-29	2001-05-29
blade cut and weld		TECHNOLOGIES				
techniques						
(US6407375)	100407070	LSP	LAPSED	1999-07-15	(US6407375)	(US6407375)
Device monitor for multiple optical signals	US6407375	TECHNOLOGIES	LAPSED	1999-07-13	2002-06-18	2002-06-18
(US6191385)					(UCC10128E)	(US6191385)
Smart controller for laser	US6191385	LSP TECHNOLOGIES	LAPSED	1999-07-07	(US6191385) 2001-02-20	2001-02-20
peening		recrimotodics			2001 02 20	
(US6566629)		LSP		1007 02 25	(US6566629)	(U\$6566629)
Hidden surface laser shock processing	US6566629	TECHNOLOGIES	LAPSED	1997-02-25	2003-05-20	2003-05-20
(US6384368)					······································	
Laser amplifier with	US6384368	LSP	LAPSED	1999-05-05	(US6384368)	(US6384368)
variable and matched	030384308	TECHNOLOGIES	- CA 320	1555 05 05	2002-05-07	2002-05-07
wavelength pumping						
(US6359257) Beam path clearing for	US6359257	LSP	LAPSED	1999-02-19	(US6359257)	(US6359257)
laser peening	U\$6359257	TECHNOLOGES	21020		2002-03-19	2002-03-19
(US6254703)						
Quality control plasma	US6254703	LSP	LAPSED	1999-02-19	(US6254703)	(US6254703)
monitor for laser shock	030254705	TECHNOLOGIES			2001-07-03	2001-07-03
processing			Į			
(US6236016) Oblique angle laser shock	US6236016	LSP	EXPIRED	1997-02-25	(US6236016)	(US6236016)
processing		TECHNOLOGIES			2001-05-22	2001-05-22
(US6288358)		LSP			(US6288358)	(US6288358)
Mobile laser peening	US6288358	TECHNOLOGIES	LAPSED	1998-12-15	2001-09-11	2001-09-11
system					•	
(US6049058) Laser peening process and	US6049058	LSP	EXPIRED	1998-12-15	(US6049058)	(US6049058)
apparatus with uniform		TECHNOLOGIES			2000-04-11	2000-04-11

PATENT REEL: 067060 FRAME: 0333

(US6373876)

2002-04-16

(US6259055)

2001-07-10

(US6203633)

2001-03-20

(US6512584)

(US6373876)

2002-04-16

(US6259055)

2001-07-10

(US6203633)

2001-03-20

(US6512584)

Quality control for laser peening	US6512584	TECHNOLOGIES	LAPSED	1998-06-29	2003-01-28	2003-01-28
(CA2239553) Laser peerxing process and apparatus with reduction of dielectric breakdown to increase peak pressure	CA2239553 CA2239553	LSP TECHNOLOGIES	LAPSED	1997-06-13	(CA2239553) 1998-12-13	(CA2239553) 2006-08-01
pulse (US6292584) Image processing for laser peening	US6292584	LSP TECHNOLOGIES	LAPSED	1998-04-08	(US6292584) 2001-09-18	(US6292584) 2001-09-18
(US5927337) Fluid valve and manifold assembly	US5927337	LSP INDUSTRIES	LAPSED	1997-03-10	(US5927337) 1999-07-27	(US5927337) 1999-07-27
(EP-861917) Oblique angle laser shock processing	EP0861917	LSP TECHNOLOGIES	LAPSED	1997-02-25	(EP-861917) 1998-09-02	
(CA2226451) Hidden surface laser shock processing	CA2226451 CA2226451	LSP TECHNOLOGIES	LAPSED	1997-02-25	(CA2226451) 1998-08-25	(CA2226451) 2007-03-27
(CA2226444) Oblique angle laser shock processing	CA2226444	LSP TECHNOLOGIES	LAPSED	1997-02-25	(CA2226444) 1998-08-25	
(US6078022) Laser peening hollow core gas turbine engine blades	US6078022	LSP TECHNOLOGIES	EXPIRED	1997-12-30	(US6078022) 2000-06-20	(US6078022) 2000-06-20
(US6064035) Process chamber for laser peening	US6064035	LSP TECHNOLOGIES	EXPIRED	1997-12-30	(US6064035) 2000-05-16	(US6064035) 2000-05-16
(US5935464) Laser shock peening apparatus with a diffractive cotic element	US5935464	LSP TECHNOLOGIES	EXPIRED	1997-09-11	(US5935464) 1999-08-10	(US5935464) 1999-08-10
(US5911891) Laser shock peening with tailored muttiple laser beams	US5911891	LSP TECHNOLOGIES	EXPARED	1997-09-11	(US5911891) 1999-06-15	(US5911891) 1999-06-15
(US5988982) Altering vibration frequencies of workpieces, such as gas turbine engine blades	US5988982	LSP TECHNOLOGIES	EXPIRED	1997-09-09	(US5988982) 1999-11-23	(US5988982) 1 999 -11-23
(US6057003) Peening process with reduction of dielectric breakdown to increase peak pressure pulse	US6057003	LSP TECHNOLOGIES	EXPIRED	1995-10-23	(US6057003) 2000-05-02	(US6057003) 2000-05-02
(US6002102) Hidden surface laser shock processing	U\$6002102	LSP TECHNOLOGIES	LAPSED	1997-02-25	(US6002102) 1999-12-14	(US6002102) 1999-12-14
(US5911890) Oblique angle laser shock	US5911890	LSP TECHNOLOGIES	EXPIRED	1997-02-25	(US5911890) 1999-06-15	(US5911890) 1999-06-15

LSP

TECHNOLOGIES

LSP

TECHNOLOGIES

LSP

TECHNOLOGIES

LSP

EXPIRED

EXPIRED

LAPSED

LAPSED

1998-10-26

1998-10-26

1998-08-14

1998-06-29

US6373876

US6259055

US6203633

US6512584

pressure pulse confinement (US6373876)

Single mode oscillator for

a laser peening laser (US6259055)

Apodizers for laser

peening systems (US6203633)

Laser peering at elevated

temperatures (US6512584)

Quality control for laser

processing

(CA2188602) Laser peening process and apparatus	CA2188602 CA2188602	LSP TECHNOLOGIES	LAPSED	1995-10-23	(CA2188602) 1997-04-24	(CA2188602) 2000-03-21
(US5741559) Laser peening process and apparatus	US5741559	LSP TECHNOLOGIES	EXPIRED	1995-10-23	(US5741559) 1998-04-21	(US5741559) 1998-04-21
(US5127019) Laser systems	US5127019	LSP TECHNOLOGIES	EXPIRED	1990-01-11	(US5127019) 1992-06-30	(US5127019) 1992-06-30

EXHIBIT B

IN THE COURT OF COMMON PLEAS
SUMMIT COUNTY, OHIO

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Plaintiff, C., *et al*., COMMON PLEAS JNTY, OHIO 2023 SEP 22 AMII: 53 CASE NO. CV-2023-05-01664 JUDGE CHRISTINE CROCHNIT COUNTY LEHK OF COURTS

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LSP TECHNOLOGIES, INC., et al.,

S&T BANK,

-vs-

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Defendants.

AGREED ORDER GRANTING MOTION OF RECEIVER FOR ORDER AUTHORIZING AUCTION SALE OF ASSETS

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This matter came before the Court upon (a) the motion (the "<u>Motion</u>") of John T. Hillyer of Hillyer Group, LLC (the "<u>Receiver</u>"), the duly appointed and acting receiver for the assets of Defendant LSP Technologies, Inc. ("<u>LSP</u>"), filed September 8, 2023, for entry of an order in accordance with Ohio Revised Code ("<u>ORC</u>") Chapter 2735 and the order appointing receiver herein entered May 30, 2023 (the "<u>Appointment Order</u>"), (i) approving the auction sale ("<u>Sale</u>") of the Assets (as defined in the Motion), free and clear of all liens, claims and encumbrances, and (ii) transferring all liens, claims and encumbrances to the proceeds of such Sale to the same extent and with the same validity and priority as currently exists, (b) the limited objection (the "<u>Limited</u> <u>Objection</u>") to the Motion filed by Airbus S.A.K. ("<u>Airbus</u>") as resolved hereby, and (c) the agreement of the Receiver, Airbus and Plaintiff S&T Bank to the relief granted herein as indicated by the signature of their respective counsel below. Upon consideration of the Motion, and the Court being duly advised in the premises, and the legal and factual bases set forth in the Motion establishing just cause for the relief requested and granted herein, the Court finds as follows: A. The Court has jurisdiction over this matter pursuant to ORC and the Appointment Order to approve the Sale of the Assets free and clear of liens, claims, interests, and encumbrances, as set forth in the Motion.

B. Such liens, claims, interests, and encumbrances upon the Assets should transfer to the proceeds of the Sale.

C. The Receiver represents that a Sale of the Assets free and clear of liens, claims, interests, and encumbrances would maximize the value of the Assets .

D. The Receiver has faithfully discharged his duties under Ohio law and the Appointment Order to maximize the value of the Assets.

E. Notice of the Motion was given to all parties with an interest in the Assets and all creditors of LSP and such notice was sufficient under the circumstances.

F. The Receiver has determined that the value to be realized through the auction is the highest and best price attainable. Thus, the Receiver submits, and the Court so finds, that the value to be received pursuant to the auction is the highest and best possible under the circumstances.

G. Airbus filed the Limited Objection to the Motion, which Limited Objection has been resolved by the terms of this Order. No other objections were filed and Plaintiff S&T Bank has consented to entry of this Order.

H. The Receiver may and should be authorized to conclude a Sale of the Assets by auction.

Accordingly, it is hereby **ORDERED** that:

1. The Motion is hereby granted in all respects.

2. The Receiver is authorized to sell the Assets by auction as set forth in the Motion.

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3. Except as otherwise set forth in this Order, the transfer of the Assets shall be free and clear of all liens, claims, interests, and encumbrances.

4. The Sale shall not terminate. cancel, or otherwise affect the rights of Airbus in and to certain intellectual property as set forth in that certain Services Research Agreement No. CW267229 dated April 24, 2018 between LSP Technologies, Inc. and Airbus (the "<u>Agreement</u>") and the Purchase Order bearing number CX01555186, dated May 16, 2023, issued by Airbus S.A.S. to LSP Technologies, Inc. (the "<u>Purchase Order</u>"), provided, however, that the Receiver and Airbus reserve all rights with respect to any claims arising under the Agreement and the Purchase Order, notwithstanding this resolution.

5. Except as otherwise set forth in the Sale Contract, all liens, claims, and encumbrances on the Assets shall attach to the proceeds of the Sale in the same order of priority as they appeared prior to the Sale.

There is no just cause for delay. This is a final appealable Order.

Direction to Clerk: Pursuant to Civ. R. 58(B), you are to serve notice of this judgment and its date of entry upon the journal to all parties not in default for failure to appear within three days of the judgment's entry upon the journal, and note the service in the appearance docket.

Agreed:

/s/ Christopher J. Niekamp Christopher J. Niekamp (#0051221) J. Alex Quay (#0085130) Buckingham, Doolittle & Burroughs, LLC 3800 Embassy Parkway, Suite 300 Akron, OH 44333 Phone: (330) 376-5300 Fax: (330) 258-6559 Email: cniekamp@bdblaw.com aquay@bdblaw.com

Counsel for Plaintiff S&T Bank

/s/ A.J. Webb

A.J. Webb (0093655) FROST BROWN TODD LLP 3300 Great American Tower 301 East Fourth Street Cincinnati, Ohio 45202 Phone: (513) 651-6800 Fax: (513) 651-6981 Email: awebb@fbtlaw.com Counsel for Airbus S.A.S

Agreed and Submitted by:

/s/ Jeffrey M. Levinson Jeffrey M. Levinson (0046746) Levinson LLP 3601 Green Road, Suite 200 Beachwood, Ohio 44122 (216) 514-4935 (telephone) (216) 532-2212 (fax) jml@jml-legal.com

Counsel for John T. Hillyer of Hillyer Group, LLC, Receiver

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BILL OF SALE

This Bill of Sale is dated effective as of this ////day of ////, 2023, from John T. Hillyer of Hillyer Group, LLC, the duly appointed and acting receiver (the "Seller") to Sunrise International, Inc., a _____ corporation (the "Purchaser").

WHEREAS, John T. Hillyer of Hillyer Group LLC (the "<u>Receiver</u>") is the duly appointed and acting receiver for LSP Technologies, Inc. ("<u>LSP</u>"), an Ohio Corporation, under that certain *Order Appointing Receiver with Full Powers* (the "<u>Appointment Order</u>") entered by the Court of Common Pleas in Summit County, Ohio (the "<u>Court</u>") in case no. CV-2023-05-1664 (the "<u>Case</u>") on May 30, 2023.

WHEREAS, pursuant to the Appointment Order the Receiver is vested with the power and authority to convey the assets of LSP, including the tangible and intangible property identified in Exhibit A attached hereto (collectively, the "Assets").

WHEREAS, Purchaser has agreed to purchase and the Receiver has agreed to sell the Assets on the terms set forth below.

NOW THEREFORE, for valuable consideration, the receipt and sufficiency is hereby acknowledged, the Receiver, in accordance with the *Agreed Order Granting Motion of Receiver for Order Authorizing Auction Sale of Assets* entered by the Court in the Case on September 22, 2023 (the "<u>Sale Order</u>," a copy of which is attached hereto as Exhibit B), does hereby sell, assign, convey and transfer unto Assignee, its successors and assigns, free and clear of any and all liens, claims, restrictions and encumbrances, excepting those rights set forth in the Sale Order, all of LSP's right, title and interest in and to the Assets, subject to the rights of Airbus under its agreements with the Debtor.

IN WITNESS WHEREOF, Seller has executed and delivered this Bill of Sale as of the date first above written.

SELLER:

John T. Hillyer of Hillyer Group, LLC, an Ohio limited liability company, as the duly appointed and acting receiver

EXHIBIT A

Note, sale of the Debtor's intellectual property is subject to the rights of Airbus under its agreements with the Debtor.

Lot # 1

Overview of 2015 LSP TECHNOLOGIES PROCUDO 200 STATIONARY TYPE LASER SHOCK PEENING SYSTEM

Item Details

2015 LSP TECHNOLOGIES PROCUDO 200 STATIONARY TYPE LASER SHOCK PEENING SYSTEM. UP TO 20-HZ PULSE RATE. 10 JOULES MAX. ENERGY. 1,053 MICRONS WAVE LENGTH. 8-16 NANOSECONDS VARIABLE PULSE WIDTH. NORTHRUP LASER. WATER FILTRATION SYSTEM. DUAL BEAM PORTS. REMOTE MONITORING SYSTEM. (2) 2017 KUKA SIX AXIS ROBOTS, MODEL KR180 WITH KRC4 ROBOT CONTROLLER. MASTER TOOL CHANGER, JAW GRIPPERS, POCKELS CELL, DUAL BEAM DELIVERY. LASER SHOT PEEN SAFETY ENCLOSURE INCLUDED, APPROXIMATELY 25-FT W X 25-FT L X 20-FT H. MADE OF BOLTED PANEL CONSTRUCTION. SIDE ACCESS DOOR. 10-FT X 10-FT DOUBLE SWING DRIVE-IN FRONT DOOR. 20-FT X 20-FT X 10-FT ATTACHED LASER ROOM WITH 6-FT X 7-FT DOUBLE SWING ACCESS DOOR. INCLUDES LIGHTING AND FIRE SAFETY WATER SPRINKLER SYSTEM.

Lot # 2

Overview of 2015 LSP PROCUDO STATIONARY TYPE SHOCK PEENING SYSTEM

Item Details

2015 LSP PROCUDO STATIONARY TYPE SHOCK PEENING SYSTEM. UP TO 20-HZ PULSE RATE. 10 JOULES MAX. ENERGY. 1,053 MICRONS WAVE LENGTH. 8-16 NANOSECONDS VARIABLE PULSE WIDTH. NORTHRUP LASER. WATER FILTRATION SYSTEM. DUAL BEAM PORTS. REMOTE MONITORING STATION. NOTE: OSCILLATOR NEEDS REPLACED.

Lot# 7

NP Photonics "The Rock" seeder laser system

Lot # 11

Group of new laser equipment parts and accessories. Large amount.

Lot #8

9144861 - APPARATUS FOR LASER PEENING HIDDEN SURFACES 9744618 - TEMPORAL PULSE SHAPING FOR LASER SHOCK PEENING 9878398 - AUTOMATED DYNAMIC LASER PEENING SYSTEM 10365479 -PROTECTION OF LASER BOND INSPECTION OPTICAL COMPONENTS 10919079 - METHOD AND APPARATUS FOR USE IN LASER SHOCK PEENING 11273521 - METHOD AND APPARATUS FOR LASER PEENING BALLISTIC ARMOR 11433476- APPARATUS FOR LASER PEENING HIDDEN SURFACES APPLICATION 20230098272 - METHOD AND APPARATUS FOR PULSED LASER BEAM CONTROL IN LASER SHOCK PEENING PROCESS APPLICATION 20200346301 - METHOD AND SYSTEM FOR USE IN LASER SHOCK PEENING AND LASER BOND INSPECTION PROCESS APPLICATION 20210083446 - METHOD AND APPARATUS FOR USE IN LASER SHOCK PEENING 9201017 - PHOTON DOPPLER VELOCIMETRY FOR LASER BOND INSPECTION JAPAN JP7038775 - METHOD AND APPARATUS FOR USE IN LASER SHOCK PEENING TREATMENT.

Lot #9

APPLICATION 20220205060 - SYSTEM AND METHOD FOR MODELING A PART AND USING LASER PEENING TO FORM OR CORRECT THE PART.

Lot # 10

8132460 - LASER INDUCED BOND DELAMINATION 8156811 - APPARATUS & METHOD FOR NON DESTRUCTIVE TESTING 10048494 - PROTECTION OF LASER BOND INSPECTION OPTICAL COMPONENTS 7775122 - TAPE OVERLAY FOR LASER BOND INSPECTION 7770454 - LASER SYSTEM AND METHOD FOR NON-DESTRUCTIVE BOND DETECTION AND EVALUATION 9857288 - LASER BOND INSPECTION WITH COMPACT SURFACE MOTION SENSOR.

Lot # 12

ANY AND ALL OF LSP'S RIGHTS IN ALL OF ITS INTELLECTUAL PROPERTY NOT OTHERWISE LISTED HEREIN (THE "<u>REMAINING IP</u>"), INCLUDING, BUT NOT LIMITED TO, LSP'S DOMAIN NAME, PHONE NUMBERS, WEBSITE, COPYRIGHTS, REGISTRATION MARKS, TRADEMARKS, URL, ALL OF WHICH ON AN "AS IS/WHERE IS" BASIS, WITHOUT REPRESENTATIONS OR WARRANTIES OF ANY KIND, INCLUDING AS TO THE LEGAL STATUS OR CONDITION OF SUCH REMAINING IP.

RECORDED: 04/10/2024