

SUPPLEMENTARY EUROPEAN SEARCH REPORT

Application Number
EP 11 72 8555

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	WO 2007/035529 A2 (UNIV WASHINGTON [US]; VAEZY SHAHRAM [US]; YU JINFEI [US]; ZDERIC VESNA) 29 March 2007 (2007-03-29)	1,4,8,9, 11,15, 24,26-28	INV. A61B8/00 A61B17/225
Y	* paragraphs [0045], [0048] - [0051], [0055], [0066], [0070]; claim 8; figures 3A, 9, 10A, 11A-12A *	2,3,5-7, 12-14, 16-23,25	A61B18/00 A61N7/00 A61H23/00
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Y	EP 0 875 203 A2 (SONOSIGHT INC [US]) 4 November 1998 (1998-11-04) * column 9, line 51 - column 10, line 4; claims 1,6; figure 4 *	2,12,13, 25	ADD. A61B17/00
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Y	US 2003/171700 A1 (MARTIN ROY W [US] ET AL) 11 September 2003 (2003-09-11) * paragraphs [0049], [0065], [0073]; figures 3, 4, 10 *	3,5-7, 14,16-23	
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A	US 2008/195003 A1 (SLIWA JOHN W [US] ET AL) 14 August 2008 (2008-08-14) * paragraphs [0050] - [0060], [0087] - [0089]; figures 1, 5 *	1-28	
			TECHNICAL FIELDS SEARCHED (IPC)
			A61N A61B
The supplementary search report has been based on the last set of claims valid and available at the start of the search.			
Place of search The Hague		Date of completion of the search 3 August 2017	Examiner Tomelleri, C
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document</p>			

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 11 72 8555

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
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03-08-2017

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专利名称(译)	薄型超声换能器		
公开(公告)号	EP2520101A4	公开(公告)日	2017-09-20
申请号	EP2011728555	申请日	2011-01-03
[标]申请(专利权)人(译)	ZETROZ		
申请(专利权)人(译)	ZETROZ LLC		
当前申请(专利权)人(译)	ZETROZ LLC		
[标]发明人	LEWIS JR GEORGE K		
发明人	LEWIS JR., GEORGE, K.		
IPC分类号	H04R17/00 A61B8/00 A61B17/00 A61B17/225 A61B18/00 A61H23/00 A61N7/00		
CPC分类号	A61B8/4227 A61B8/4236 A61B8/4281 A61B8/44 A61B8/4427 A61B17/2251 A61B2017/00734 A61B2017/2253 A61N7/00 A61N2007/006 A61N2007/0078 A61N2007/0091 A61N2007/0095 Y10T29/49005		
优先权	61/291804 2009-12-31 US 61/291779 2009-12-31 US 61/291732 2009-12-31 US		
其他公开文献	EP2520101A2		
外部链接	Espacenet		

摘要(译)

便携式超声波系统技术领域本发明涉及一种便携式超声波系统，其可用于各种超声波应用。便携式超声系统包括能量产生模块，其可操作以产生可被转换成超声能量的驱动信号，其中能量产生模块包括电源，振荡器和驱动器组件。便携式超声系统还包括具有压电部件和透镜部件的超声换能器。超声换能器可操作以从能量产生模块接收驱动信号，将驱动信号转换成超声能量，并控制从超声换能器发射的超声能量的方向。还公开了包含本发明的便携式治疗超声系统的装置，以及使用该系统的方法。



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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to:	CLASSIFICATION OF THE APPLICATION (IPC)
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[0158], [0159], [0160], [0161], [0162], [0163], [0164], [0165], [0166], [0167], [0168], [0169], [0170], [0171], [0172], [0173], [0174], [0175], [0176], [0177], [0178], [0179], [0180], [0181], [0182], [0183], [0184], [0185], [0186], [0187], [0188], [0189], [0190], [0191], [0192], [0193], [0194], [0195], [0196], [0197], [0198], [0199], [0200], [0201], [0202], [0203], [0204], [0205], [0206], [0207], [0208], [0209], [0210], [0211], [0212], [0213], [0214], [0215], [0216], [0217], [0218], [0219], [0220], [0221], [0222], [0223], [0224], [0225], [0226], [0227], [0228], [0229], [0230], [0231], [0232], [0233], [0234], [0235], [0236], [0237], [0238], [0239], [0240], [0241], [0242], [0243], [0244], [0245], [0246], [0247], [0248], [0249], [0250], [0251], [0252], [0253], [0254], [0255], [0256], [0257], [0258], [0259], [0260], [0261], [0262], [0263], [0264], [0265], [0266], [0267], [0268], [0269], [0270], [0271], [0272], [0273], [0274], [0275], [0276], [0277], [0278], [0279], [0280], [0281], [0282], [0283], [0284], [0285], [0286], [0287], [0288], [0289], [0290], [0291], [0292], [0293], [0294], [0295], [0296], [0297], [0298], [0299], [0300], [0301], [0302], [0303], [0304], [0305], [0306], [0307], [0308], [0309], [0310], [0311], [0312], [0313], [0314], [0315], [0316], [0317], [0318], [0319], [0320], [0321], [0322], [0323], [0324], [0325], [0326], [0327], [0328], [0329], [0330], [0331], [0332], [0333], [0334], [0335], [0336], [0337], [0338], [0339], [0340], [0341], [0342], [0343], [0344], [0345], [0346], [0347], [0348], [0349], [0350], [0351], [0352], [0353], [0354], [0355], [0356], [0357], [0358], [0359], [0360], [0361], [0362], [0363], [0364], [0365], [0366], [0367], [0368], [0369], [0370], [0371], [0372], [0373], [0374], [0375], [0376], [0377], [0378], [0379], [0380], [0381], [0382], [0383], [0384], [0385], [0386], [0387], [0388], [0389], [0390], [0391], [0392], [0393], [0394], [0395], [0396], [0397], [0398], [0399], [0400], [0401], [0402], [0403], [0404], [0405], [0406], [0407], 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[0533], [0534], [0535], [0536], [0537], [0538], [0539], [0540], [0541], [0542], [0543], [0544], [0545], [0546], [0547], [0548], [0549], [0550], [0551], [0552], [0553], [0554], [0555], [0556], [0557], [0558], [0559], [0560], [0561], [0562], [0563], [0564], [0565], [0566], [0567], [0568], [0569], [0570], [0571], [0572], [0573], [0574], [0575], [0576], [0577], [0578], [0579], [0580], [0581], [0582], [0583], [0584], [0585], [0586], [0587], [0588], [0589], [0590], [0591], [0592], [0593], [0594], [0595], [0596], [0597], [0598], [0599], [0600], [0601], [0602], [0603], [0604], [0605], [0606], [0607], [0608], [0609], [0610], [0611], [0612], [0613], [0614], [0615], [0616], [0617], [0618], [0619], [0620], [0621], [0622], [0623], [0624], [0625], [0626], [0627], [0628], [0629], [0630], [0631], [0632], [0633], [0634], [0635], [0636], [0637], [0638], [0639], [0640], [0641], [0642], [0643], [0644], [0645], [0646], [0647], [0648], [0649], [0650], [0651], [0652], [0653], [0654], [0655], [0656], [0657], [0658], [0659], [0660], [0661], [0662], [0663], [0664], [0665], [0666], [0667], [0668], [0669], [0670], [0671], [0672], [0673], [0674], [0675], [0676], [0677], [0678], [0679], [0680], [0681], [0682], [0683], [0684], [0685], [0686], [0687], [0688], [0689], [0690], [0691], [0692], [0693], [0694], [0695], [0696], [0697], [0698], [0699], [0700], [0701], [0702], [0703], [0704], [0705], [0706], [0707], [0708], [0709], [0710], [0711], [0712], [0713], [0714], [0715], [0716], [0717], [0718], [0719], [0720], [0721], [0722], [0723], [0724], [0725], [0726], [0727], [0728], [0729], [0730], [0731], [0732], [0733], [0734], [0735], [0736], [0737], [0738], [0739], [0740], [0741], [0742], [0743], [0744], [0745], [0746], [0747], [0748], [0749], [0750], [0751], [0752], [0753], [0754], [0755], [0756], [0757], [0758], [0759], [0760], [0761], [0762], [0763], [0764], [0765], [0766], [0767], [0768], [0769], [0770], [0771], [0772], [0773], [0774], [0775], [0776], [0777], [0778], [0779], [0780], [0781], [0782], [0783], [0784], [0785], [0786], [0787], [0788], [0789], [0790], [0791], [0792], [0793], [0794], [0795], [0796], [0797], [0798], [0799], [0800], [0801], [0802], [0803], [0804], [0805], [0806], [0807], [0808], [0809], [0810], [0811], [0812], [0813], [0814], [0815], [0816], [0817], [0818], [0819], [0820], [0821], [0822], [0823], [0824], [0825], [0826], [0827], [0828], [0829], [0830], [0831], [0832], [0833], [0834], [0835], [0836], [0837], [0838], [0839], [0840], [0841], [0842], [0843], [0844], [0845], [0846], [0847], [0848], [0849], [0850], [0851], [0852], [0853], [0854], [0855], [0856], [0857], [0858], [0859], [0860], [0861], [0862], [0863], [0864], [0865], [0866], [0867], [0868], [0869], [0870], [0871], [0872], [0873], [0874], [0875], [0876], [0877], [0878], [0879], [0880], [0881], [0882], [0883], [0884], [0885], [0886], [0887], [0888], [0889], [0890], [0891], [0892], [0893], [0894], [0895], [0896], [0897], [0898], [0899], [0900], [0901], [0902], [0903], [0904], [0905], [0906], [0907], [0908], [0909], [0910], [0911], [0912], [0913], [0914], [0915], [0916], [0917], [0918], [0919], [0920], [0921], [0922], [0923], [0924], [0925], [0926], [0927], [0928], [0929], [0930], [0931], [0932], [0933], [0934], [0935], [0936], [0937], [0938], [0939], [0940], [0941], [0942], [0943], [0944], [0945], [0946], [0947], [0948], [0949], [0950], [0951], [0952], [0953], [0954], [0955], [0956], [0957], [0958], [0959], [0960], [0961], [0962], [0963], [0964], [0965], [0966], [0967], [0968], [0969], [0970], [0971], [0972], [0973], [0974], [0975], [0976], [0977], [0978], [0979], [0980], [0981], [0982], [0983], [0984], [0985], [0986], [0987], [0988], [0989], [0990], [0991], [0992], [0993], [0994], [0995], [0996], [0997], [0998], [0999], [1000]	3,5,7, 14,16-23	
A	US 2008/195003 A1 (SLIWA JOHN W [US] ET AL) 14 August 2008 (2008-08-14) * paragraphs [0050], [0051], [0052], [0053], [0054], [0055], [0056], [0057], [0058], [0059], [0060], [0061], [0062], [0063], [0064], [0065], [0066], [0067], [0068], [0069], [0070], [0071], [0072], [0073], [0074], [0075], [0076], [0077], [0078], [0079], [0080], [0081], [0082], [0083], [0084], [0085], [0086], [0087], [0088], [0089], [0090], [0091], [0092], [0093], [0094], [0095], [0096], [0097], [0098], [0099], [0100], [0101], [0102], [0103], [0104], [0105], [0106], [0107], [0108], [0109], [0110], [0111], [0112], [0113], [0114], [0115], [0116], [0117], [0118], [0119], [0120], [0121], [0122], [0123], [0124], [0125], [0126], [0127], [0128], [0129], [0130], [0131], [0132], [0133], [0134], [0135], [0136], [0137], [0138], [0139], [0140], [0141], [0142], [0143], [0144], [0145], [0146], [0147], [0148], [0149], [0150], [0151], [0152], [0153], [0154], [0155], [0156], [0157], [0158], [0159], [0160], [0161], [0162], [0163], [0164], [0165], [0166], [0167], [0168], [0169], [0170], [0171], [0172], [0173], [0174], [0175], [0176], [0177], [0178], [0179], [0180], [0181], [0182], [0183], [0184], [0185], [0186], [0187], [0188], [0189], [0190], [0191], [0192], [0193], [0194], [0195], [0196], [0197], [0198], [0199], [0200], [0201], [0202], [0203], [0204], [0205], [0206], [0207], [0208], [0209], [0210], [0211], [0212], [0213], [0214], [0215], [0216], [0217], [0218], [0219], [0220], [0221], [0222], [0223], [0224], [0225], [0226], [0227], [0228], [0229], [0230], [0231], [0232], [0233], [0234], [0235], [0236], [0237], [0238], [0239], [0240], [0241], [0242], [0243], [0244], [0245], [0246], [0247], [0248], [0249], [0250], [0251], [0252], [0253], [0254], [0255], [0256], [0257], [0258], [0259], [0260], [0261], [0262], [0263], [0264], [0265], [0266], [0267], [0268], [0269], [0270], [0271], [0272], [0273], [0274], [0275], [0276], [0277], [0278], [0279], [0280], [0281], [0282], [0283], [0284], [0285], [0286], [0287], [0288], [0289], [0290], [0291], [0292], [0293], [0294], [0295], [0296], [0297], [02		