

	153		155
	1 you believe is not enabled in the Zajac 038 patent?	1 Q. In conducting a 4D survey, is the general goal	
	2 A. Correct.	2 to repeat positions from a prior survey?	
	3 Q. There aren't any additional limitations that	3 A. Sometimes there is, in fact, in practice a	
1:04	4 you list in your opinions as being not enabled in the	4 difference of opinion in the operation of repeat 4D	
	5 Zajac 038 patent; is that correct?	5 surveys to disparate camps of technical analysis, one of	
	6 A. I'm sorry, I didn't catch the first part of	6 which says that one should reoccupy all of the initial	
	7 what you said. There are not any additional --	7 positions, even if they were very mishappen geometries,	
	8 Q. What's listed on Page 20 is --	8 and then there is also the concept that you should do	
	9 A. -- term --	9 something that's closer to what the original	
1:05	10 Q. -- is -- is all of the limitations that you	10 straightforward, simple acquisition plan was.	
	11 believe are not enabled by the Zajac patent? There	11 Q. In the first approach for the repeat survey,	
	12 aren't any more that aren't listed on Page 20?	12 you'd be trying to repeat the exact positions from the	
	13 A. Agreed, there is not another section, per se.	13 first survey?	
1:05	14 Q. And you don't have any other Section 112	14 A. In great detail, if possible.	
	15 analysis for the Zajac patent for indefiniteness or for	15 Q. In the second -- in the second approach, you'd	
	16 best motive or anything like that?	16 be trying to repeat what the original position should	
	17 A. Yeah, this -- this does comprise the	17 have been?	
	18 Section 112 analysis, these several pages.	18 A. Or some intermediate compromise is often the	
1:08	19 Q. And you go through patent by patent, and all	19 case in practice. If you had great variation in	
	20 of your 112 opinions are put under each of the	20 streamer feather or array geometry, slash, array shape	
	21 respective patents?	21 in the nomenclature of the Markman, there could often be	
	22 A. Well, no, there is also some general	22 the concept to try and do a repeat survey that had	
	23 commentary on Page 19 that's not listed patent by	23 something like the average feather angle, for example,	
1:08	24 patent.	24 but without all of the intricate variations.	
	25 Q. In terms of your opinions as to why each	25 Q. For the first camp of -- or school of thought,	
	154	156	
	1 patent may or may not be valid, for each respective	1 the desired position for the repeat 4D survey would be	
	2 patent, it's under the patent specific section?	2 the actual position from the prior survey?	
	3 A. Okay, yes.	3 A. That would be the one extreme, yes, to...	
2:08	4 Q. For the Zajac patent, what do you believe is	4 Q. And in practice, there is some compromise	
	5 not enabled about desired positions or desired streamer	5 between that being the desired position and some blend	
	6 positions in the specification of the Zajac patent?	6 of that in what was originally intended; is that what	
	7 A. A desired position implies some concepts of	7 you're saying?	
	8 what is optimal or some concepts of a so-called cost	8 A. Well, there is the other end, remember, which	
2:08	9 function, some -- some value to be minimized or	9 is to always try and get the original, straightforward,	
	10 maximized, and there is multiple different versions of	10 simple design, which would typically be series of lines	
	11 such a optimization or -- or maximization, minimization	11 with no feather, and straight and parallel. And then	
	12 that could be part of marine seismic operations to try	12 there is -- there is various variations in between of	
	13 and minimize the total amount of time to complete a	13 trying to obtain some key characteristics.	
2:08	14 survey, to try and minimize the distances to approach	14 If, for instance, the azimuths of -- of a	
	15 various obstructions, the desire to have particular	15 large part of the survey's feather angles were all	
	16 geometries of acquisition orientations of streamers,	16 oriented a particular angle that was different than	
	17 et cetera.	17 the -- the nominal acquisition direction, then you might	
	18 Q. So there -- it's not that the term "desired	18 try and mimic that -- that relatively simple average	
2:08	19 streamer position" or "desired position" is ambiguous;	19 model.	
	20 it's that you don't think the 038 patent tells you how	20 Q. Depending on which approach -- which end of	
	21 to figure out what that desired position should be?	21 the spectrum or some blending of the spectrum would	
	22 A. Correct, yeah, it's the how to do it.	22 dictate what your desired positions are for the repeat?	
	23 Q. How to figure out what the optimal desired	23 A. Yes, yeah.	
	24 position is?	24 Q. In terms of the 017 patent, which starts about	
2:04	25 A. Yeah.	25 halfway down on Page 20, you list two limitations:	

39 (Pages 153 to 156)

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