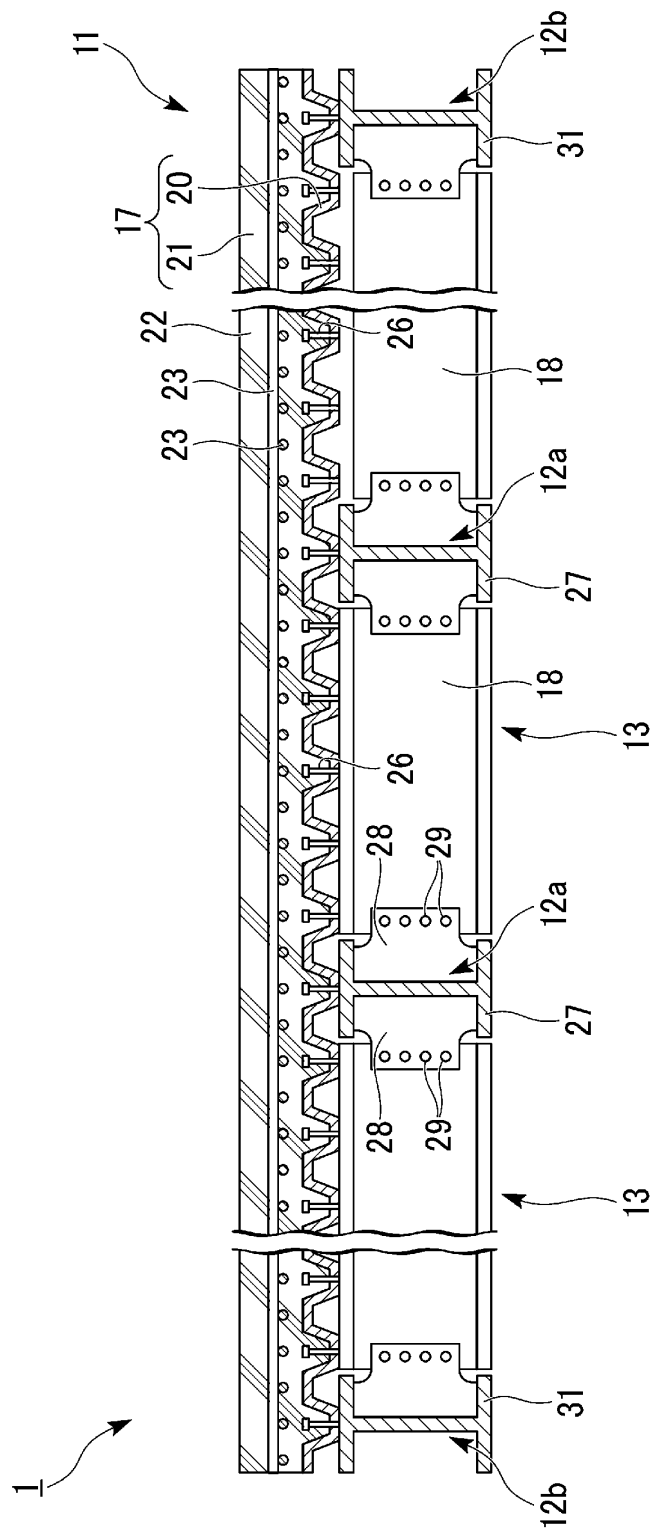
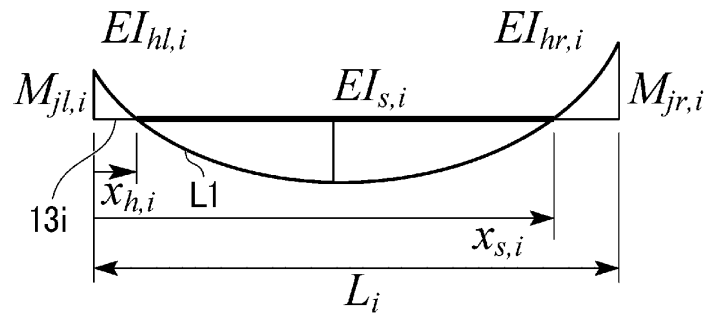


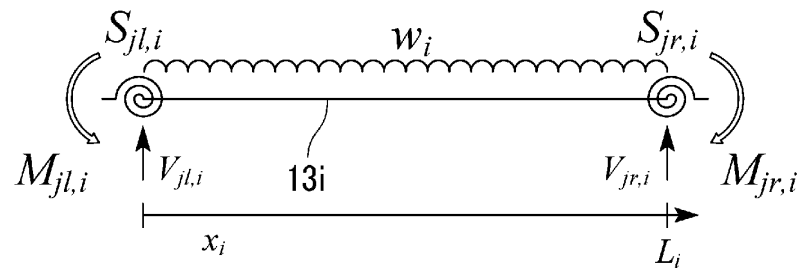
[図2]



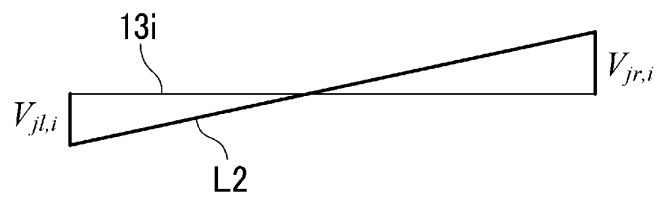
[図3]



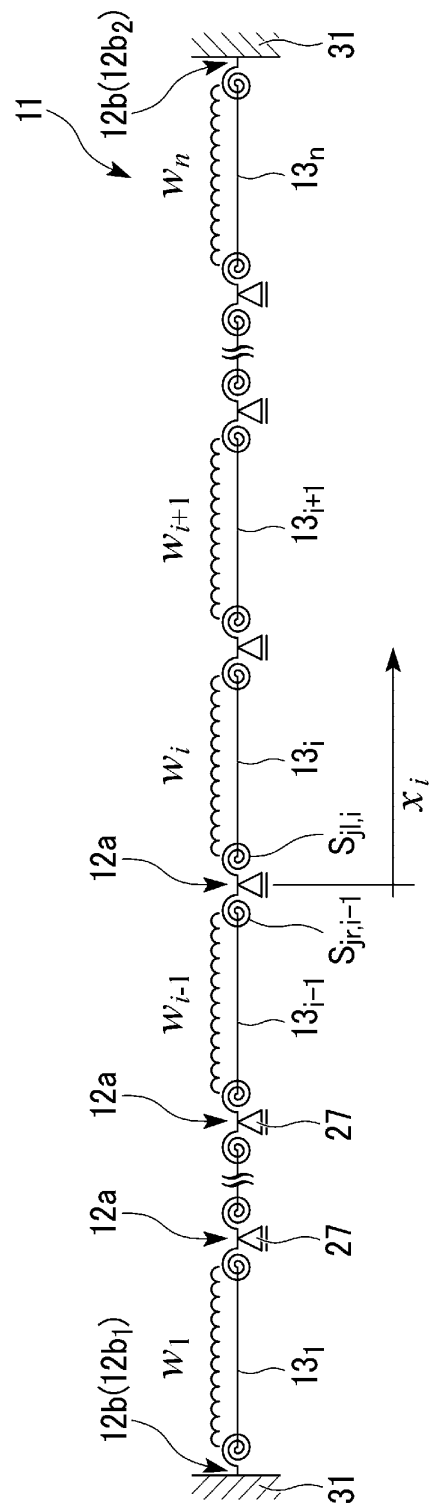
[図4]



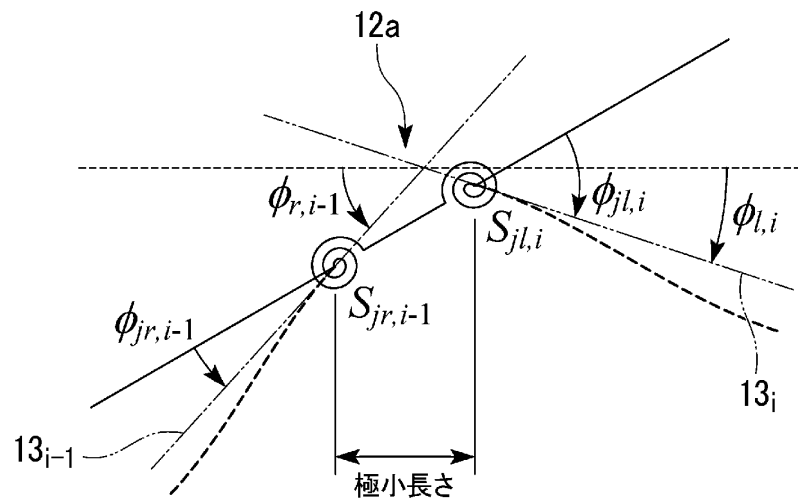
[図5]



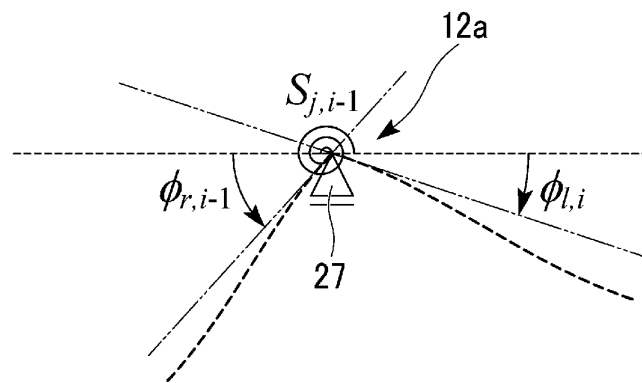
[図6]



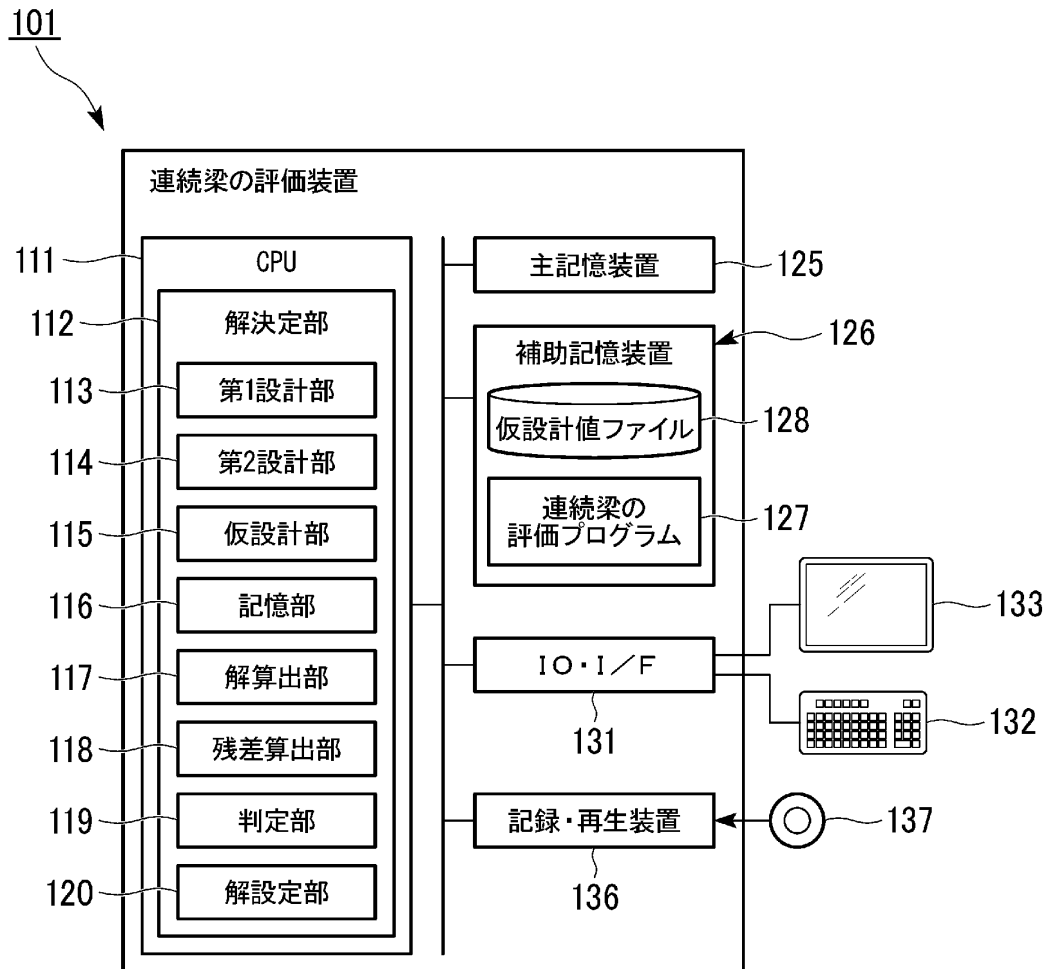
[図7]



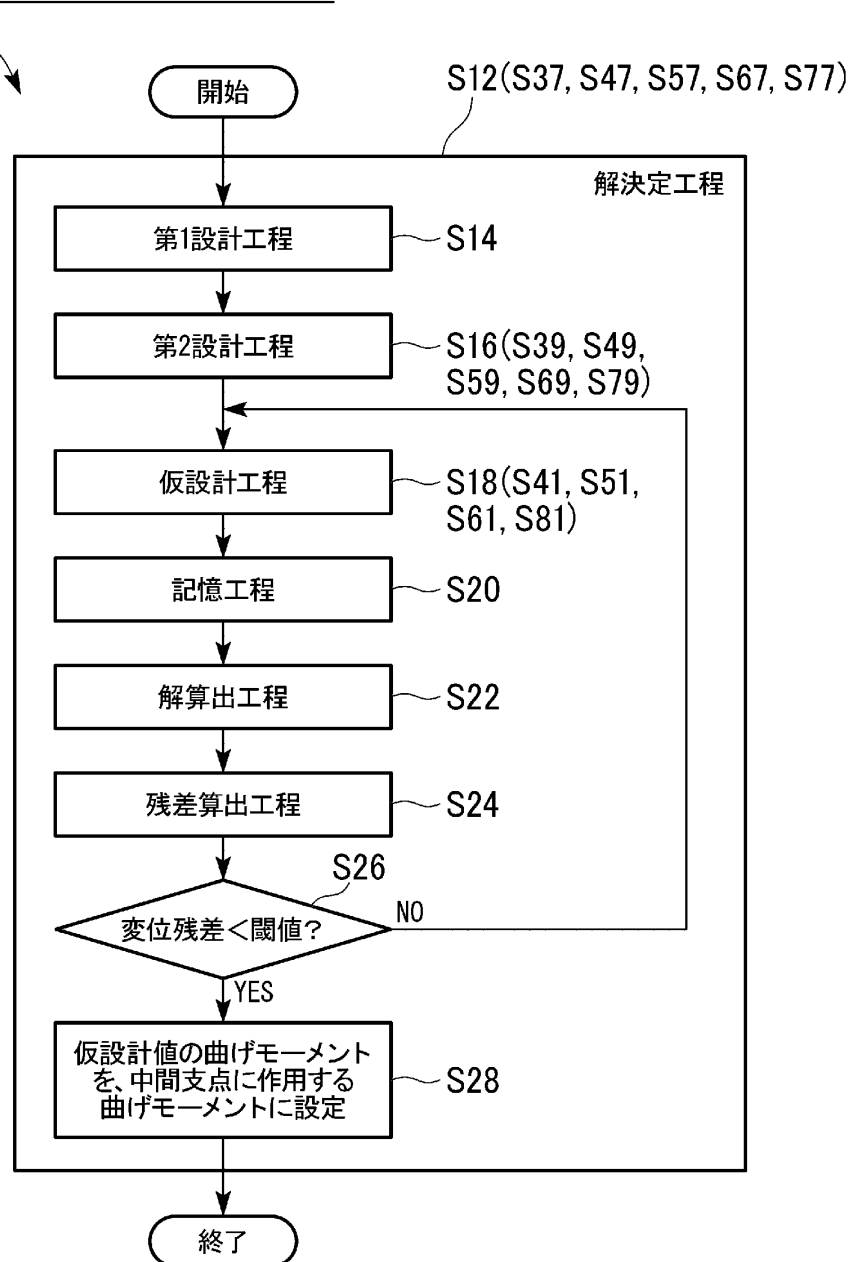
[図8]



[図9]



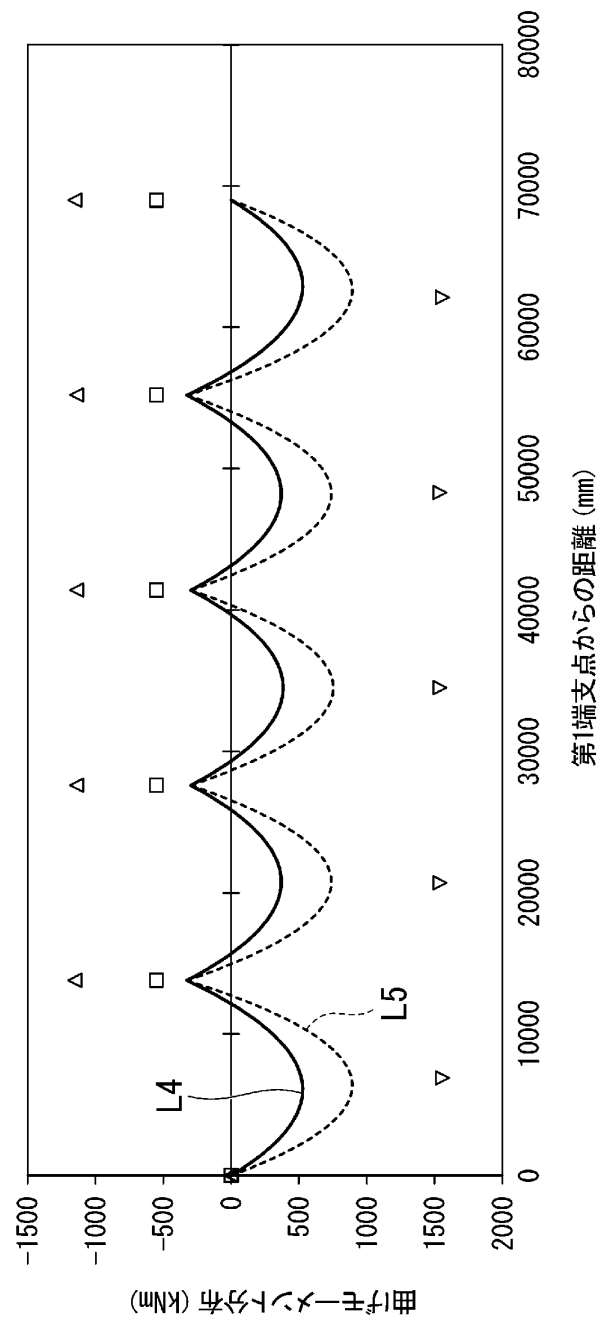
[図10]

S11(S36, S46, S56, S66, S76)

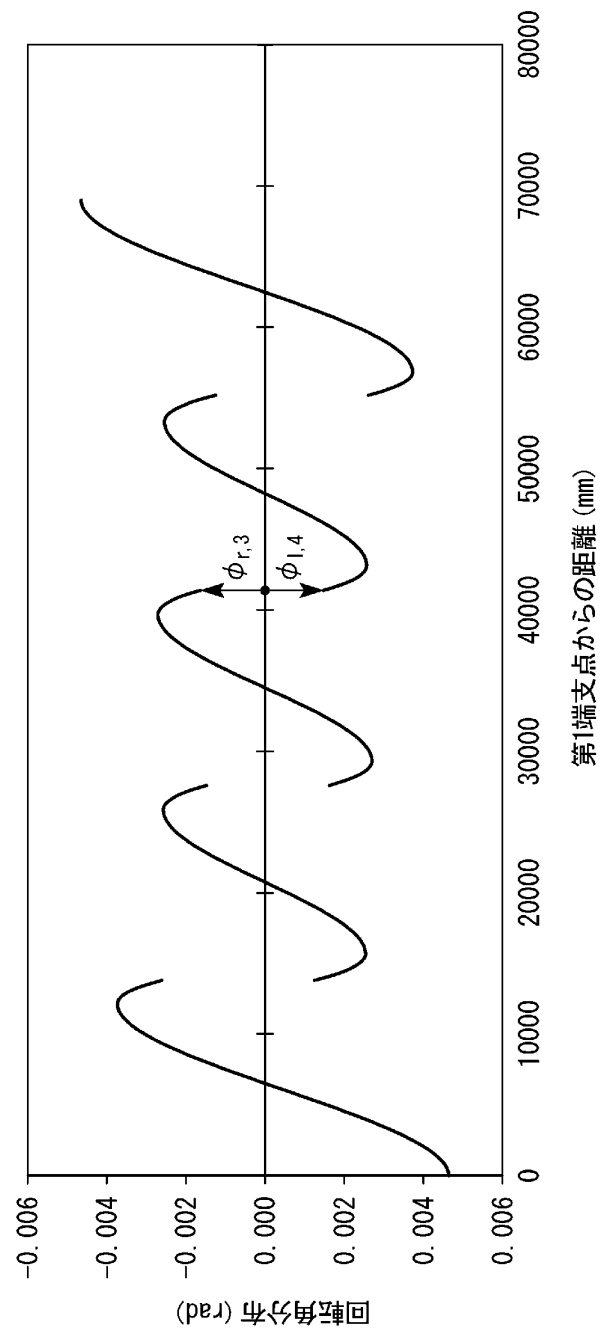
[図11]

Number of continuous beam span (n)		Threshold for ending convergence				
		1	2	3	4	5
Span	Span	13800	13800	13800	13800	13800
Length between supports	LL	2.29.E+14	2.24.E+14	2.24.E+14	2.24.E+14	2.29.E+14
Flexure stiffness against hogging bending	Elh,i	5.10.E+14	4.90.E+14	4.90.E+14	4.90.E+14	5.10.E+14
Flexure stiffness against sagging bending	Elis,i	0.00.E+00	1.91.E+11	1.91.E+11	1.91.E+11	1.51.E+11
Rotational rigidity of joint on lefthand end	Sj,i	1.51.E+11	1.91.E+11	1.91.E+11	1.91.E+11	0.00.E+00
Rotational rigidity of joint on righthand end	Sj,r,i	28.56	28.56	28.56	28.56	28.56
Composite stage bad	ww	15.529096	15.529096	15.529096	15.529096	15.529096
Self weight (If separated)	ww_SW	0.00.E+00	0.00.E+00	0.00.E+00	0.00.E+00	0.00.E+00
■ Determining moment, rotation and deflection						
Determined rotation at lefthand end of span	$\phi_{l,i}$	1.25.E-03	1.63.E-03	1.48.E-03	1.48.E-03	2.61.E-03
Initial joint moment at lefthand of span (for convergence)	Mj,l,i	0.00.E+00	324821439	296079147	296079147	324821439
Determined joint moment at righthand of span	Mj,r,i	3.25E+08	2.96E+08	2.96E+08	3.25E+08	0.00E+00
Determined shear force on the lefthand end of span	Vl,i	173526	199147	197064	194981	220602
Determined shear force on the righthand end of span	Vr,i	220602	194981	197064	199147	173526
Determined zero moment point location (Lefthand)	xh,i	0	1886	1716	1740	1648
Determined zero moment point location (Righthand)	xs,i	12152	12060	12084	11914	13800
For Calculation						
Determined rotation at righthand end of span	$xn=xh,n$	0.00.E+00	-2.90.E+11	-2.42.E+11	-2.45.E+11	-2.57.E+11
	$xn=xs,n$	4.27.E+12	2.22.E+12	2.41.E+12	2.26.E+12	4.01.E+12
	$xn=h$	4.01.E+12	1.97.E+12	2.17.E+12	1.97.E+12	4.01.E+12
	$xn=xh,n$	0.00.E+00	-3.70.E+14	-2.80.E+14	-2.88.E+14	-2.85.E+14
	$xn=xs,n$	2.59.E+16	9.42.E+15	1.10.E+16	9.97.E+15	2.25.E+16
	$xn=h$	3.28.E+16	1.31.E+16	1.50.E+16	1.41.E+16	2.25.E+16
	$\phi_{r,i}(xn=h)$	-2.61.E-03	-1.48.E-03	-1.63.E-03	-1.25.E-03	-4.64.E-03
	Sj,eq,i	8.42.E+10	9.54.E+10	8.42.E+10	8.42.E+10	0.00.E+00
	$\delta c_i(xn=h)$	4.E-14	-2.E-14	0.E+00	7.E-15	-1.E-14
	$\delta c_i(xn=h)^{-2}$	2.E-27	3.E-28	0.E+00	5.E-29	2.E-28
Through length from the lefthand edge of continuous beam	x_{whole}	1.E+04	3.E+04	4.E+04	6.E+04	7.E+04
	Moment correspond to rotation and stiffness (Lefthand)	0.00.E+00	3.25.E+08	2.96.E+08	2.96.E+08	3.25.E+08
	Mj,l,i by $Sj,l,i^{\frac{1}{2}}(\phi_{l,i})^{\frac{1}{2}}$	0.00%	0.00%	0.00%	0.00%	0.00%
	Check boundary condition satisfied	OK	OK	OK	OK	OK
Moment correspond to rotation and stiffness (Righthand)	Mj,r,i by $Sj,r,i^{\frac{1}{2}}(\phi_{r,i})^{\frac{1}{2}}$	3.25.E+08	2.96.E+08	2.96.E+08	3.25.E+08	0.00.E+00
	Check boundary condition satisfied	0.00%	0.00%	0.00%	0.00%	0.00%
※0: Lefthand end, c						
Total bad in each span		1.00	1.00	1.00	1.00	1.00
Total bad		394	394	394	394	394
Total reaction force		1971	1971			
Optimization						
Objective variable (Target cell to be minimized)	$\sum (\delta c_i)^{-2}$	mm2	2.E-27			
Dominant variables	$\phi_{0,i}$ or Mj,l,i or Mj,r,i					
	Result (Changing cells)					
Search range (Bound constraints for changing cells)	Low	-3.07.E+11	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	High	3.07.E+11	4.53E+10	4.53E+10	4.53E+10	0.00E+00

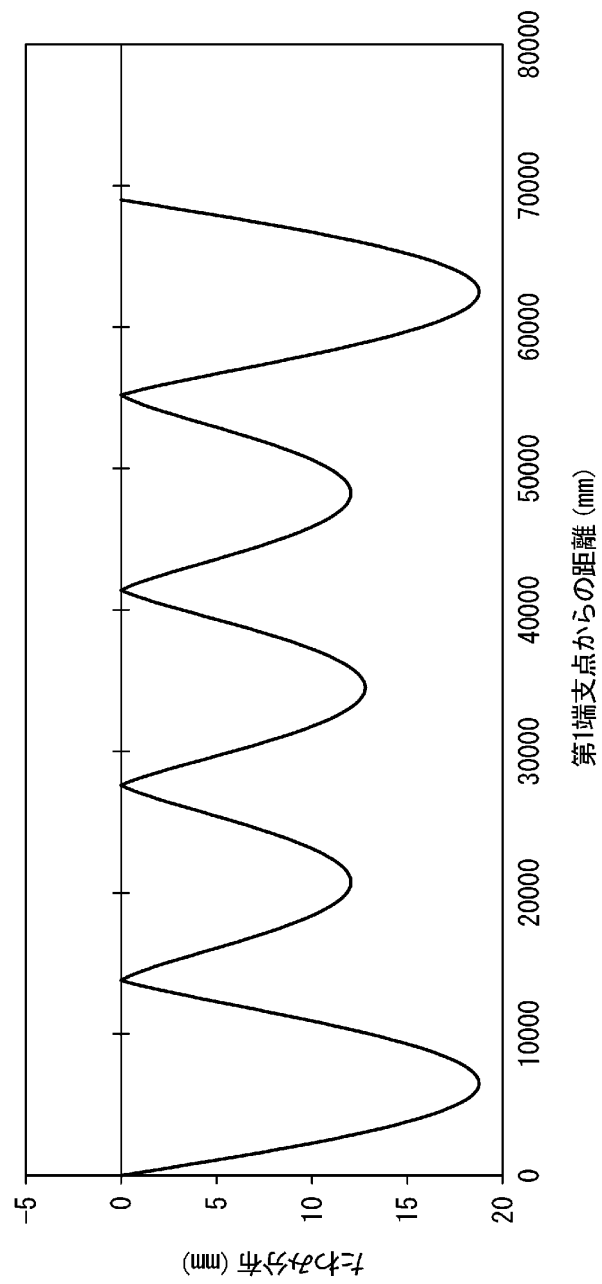
[図12]



[図13]

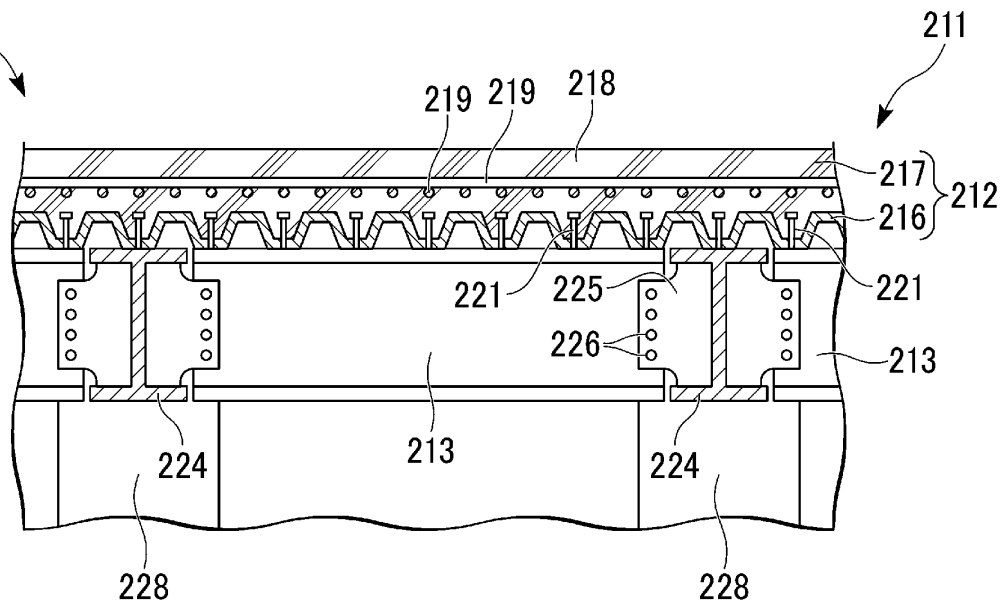


[図14]

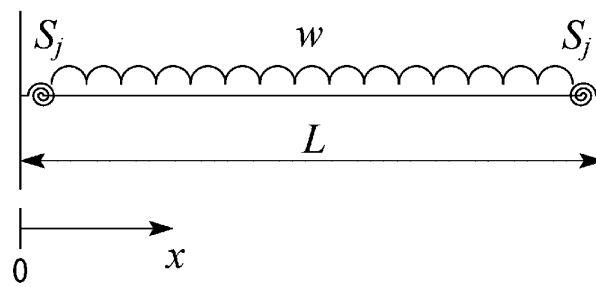


[図15]

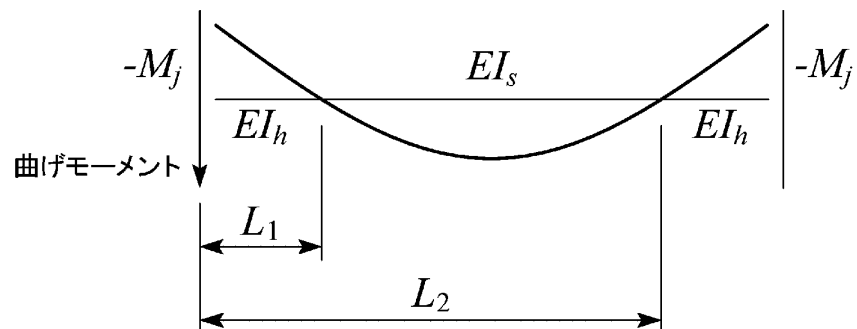
200



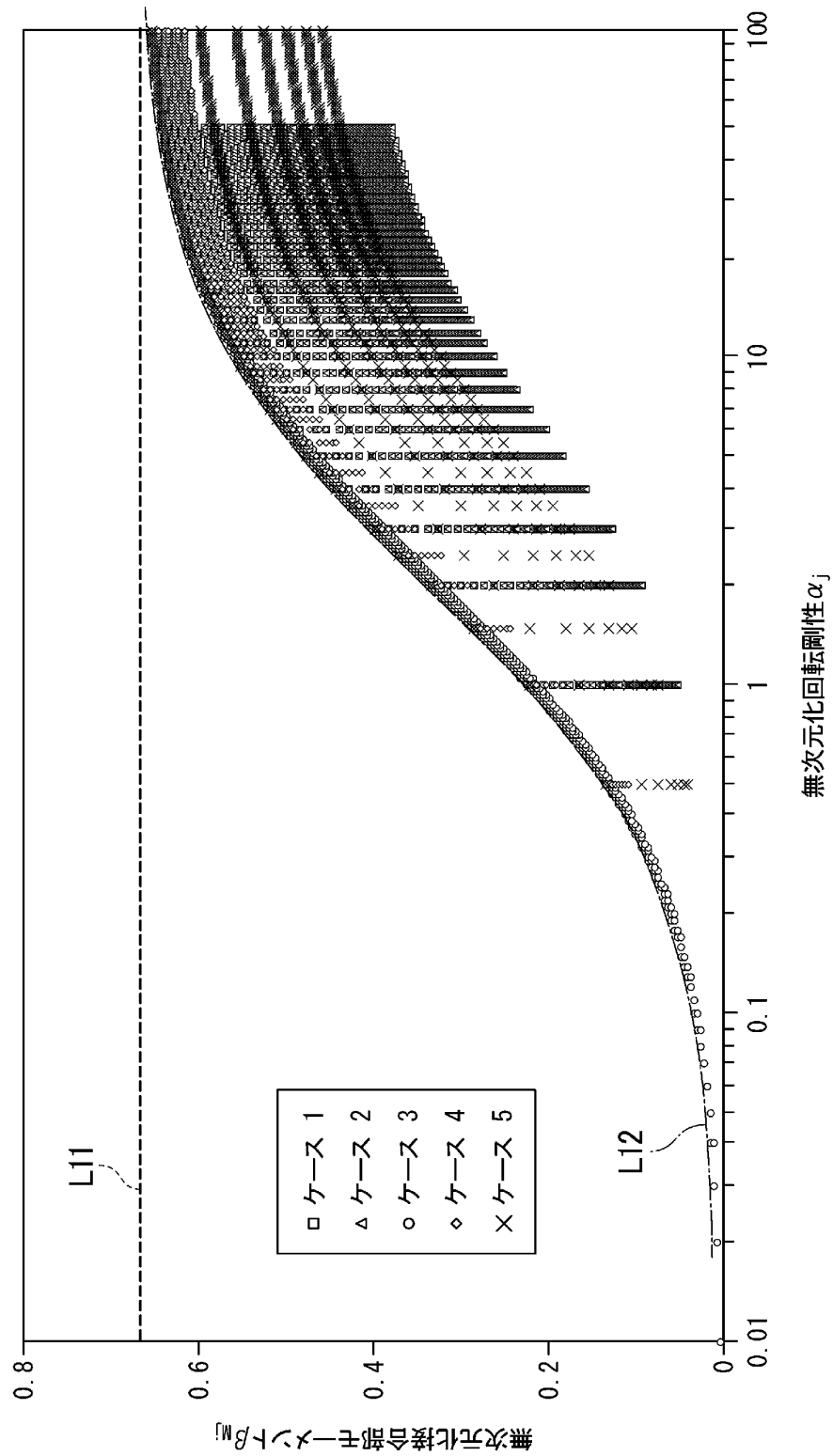
[図16]



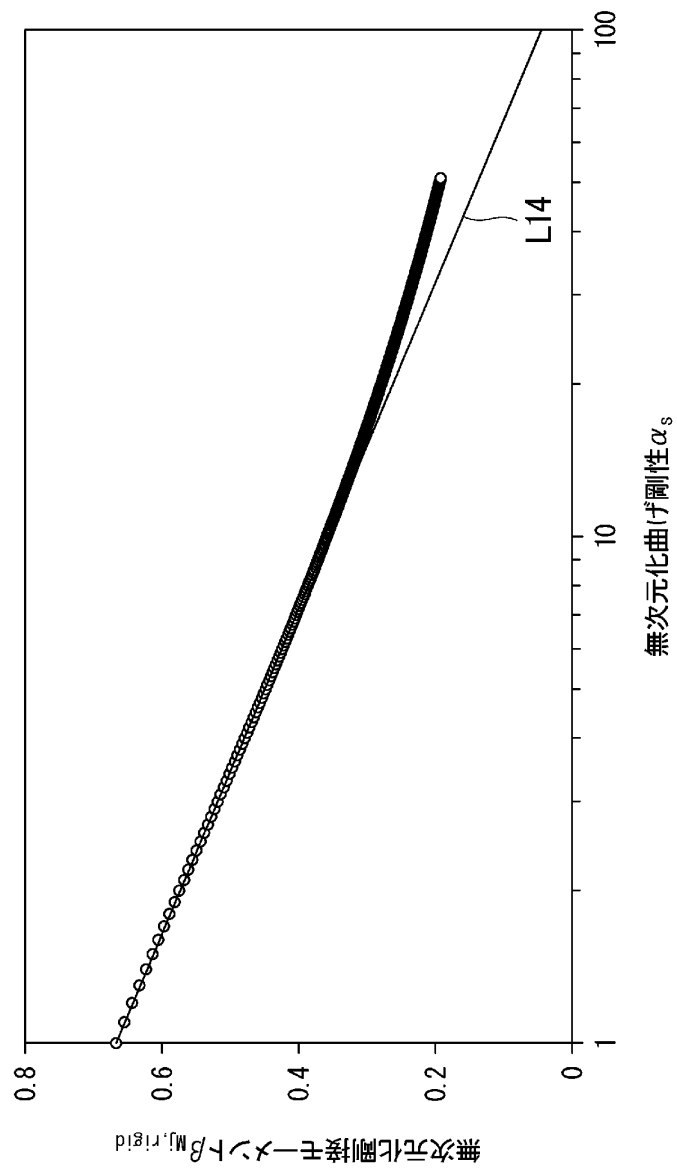
[図17]



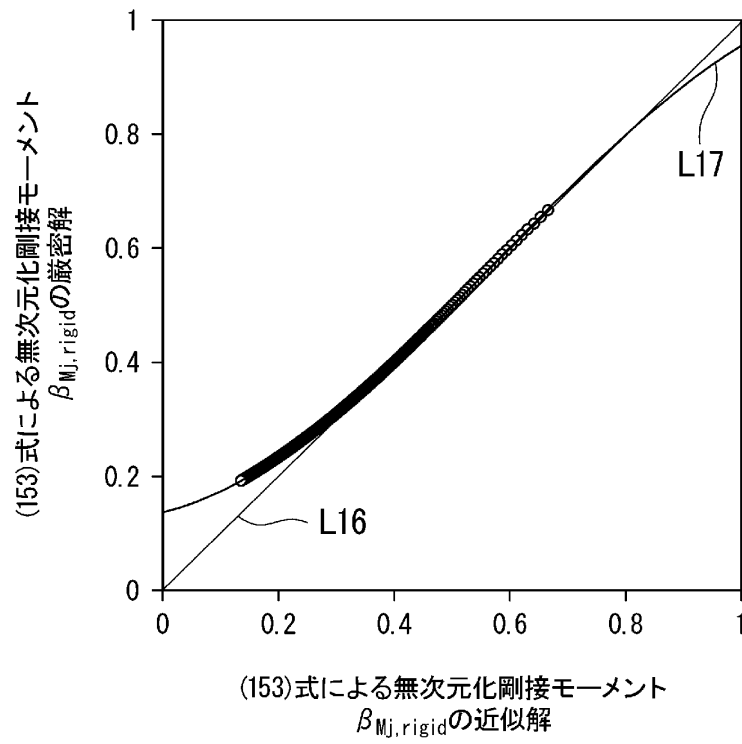
[図18]



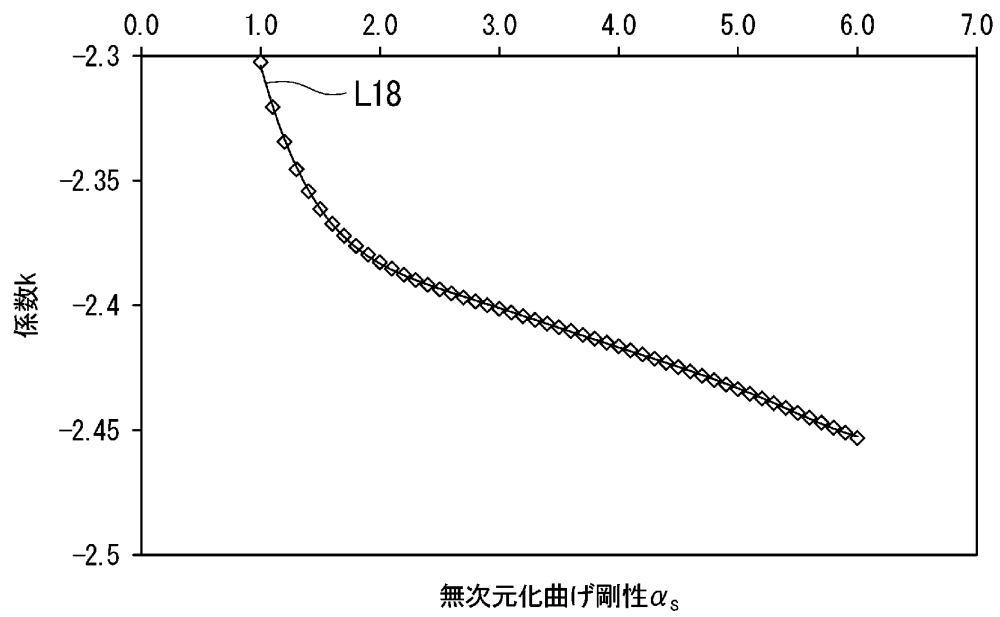
[図19]



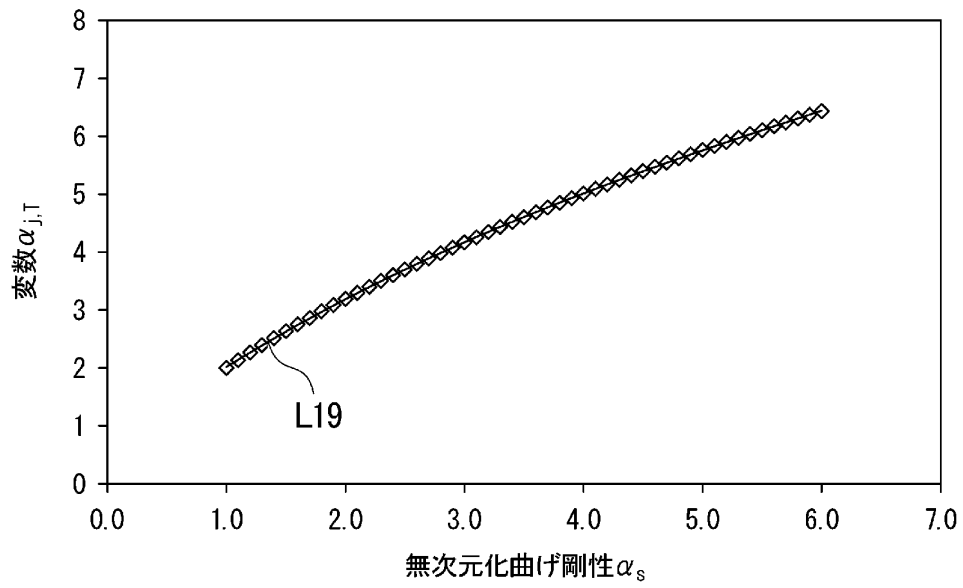
[図20]



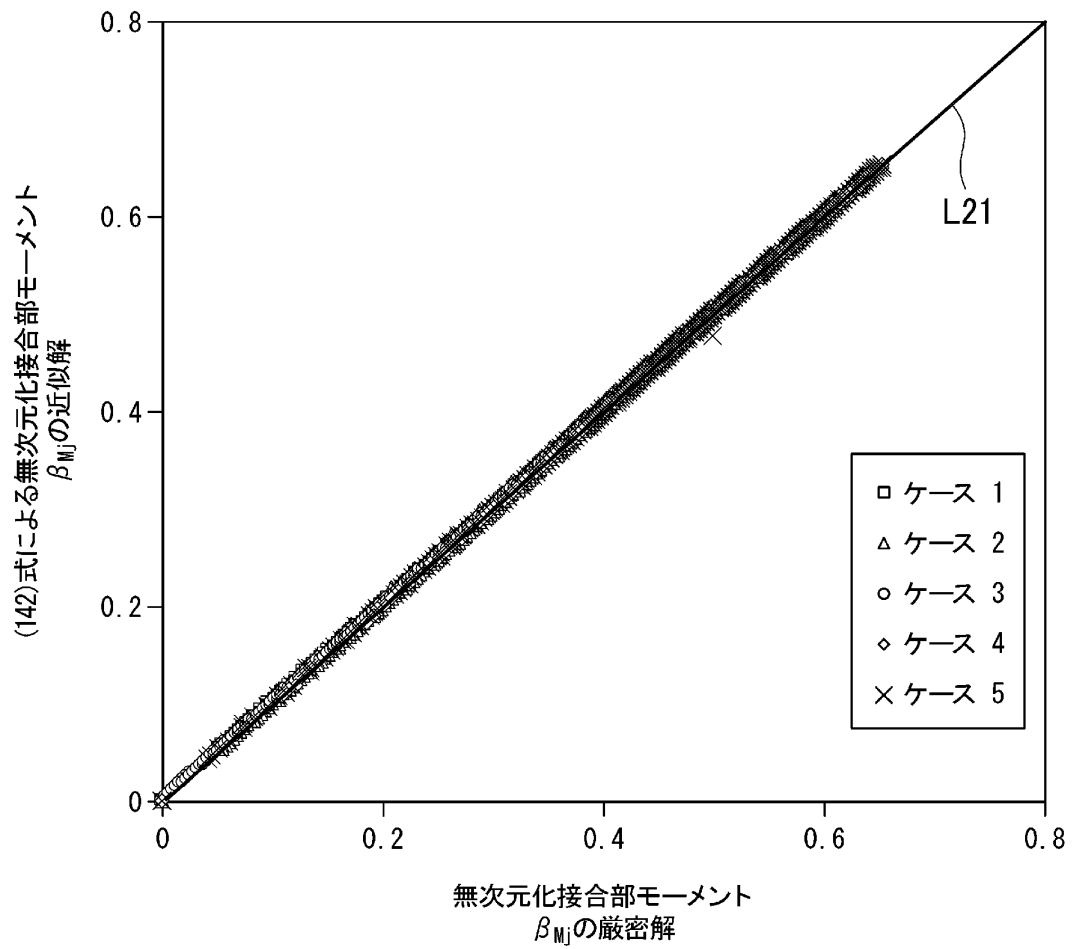
[図21]



[図22]



[図23]



[図24]

