

Problem 9: Area Filling Test Results

	A 15						A18					
	case1		case2		case3		case1		case2		case3	
	offset=0	offset !=0	offset=0	offset!=0	offset=0	offset!=0	offset=0	offset!=0	offset=0	offset!=0	offset=0	offset!=0
required density	0.3	0.3	0.3	0.3	0.6	0.6	0.3	0.3	0.3	0.3	0.6	0.6
exclusion density	0.057	0.057	0.435	0.435	0.19	0.19	0.057	0.057	0.435	0.435	0.19	0.19
resulted density	0.508	0.462	0.56	0.44	Seg. Fault	Seg. Fault	0.485	0.133 (NO)	0.56	0.5	0.64	0.275(NO)
output file size	17.5KB	19.16KB	4.76KB	1.64KB	n/a	n/a	1.97KB	1.88KB	1.12KB	3.24KB	150K	2.5MB
spacing rule	OK	9 Violations	OK 3 empty zones	OK 4 empty zones	n/a	n/a	OK	out of boundary	out of boundary 4 empty zones	overlapped patterns	698 Violation 3 empty zones	615 Violation
uniformity	Great	Great	n/a	n/a	n/a	n/a	Fair	No	No	No	No	No
# of filling patterns	350	384	81	28	n/a	n/a	321	57	79	130	527334	97132
comments	1. Flatten CIF output; filesize will too large for huge filling patterns; 2. Use different patterns in different filling zones; 3. Rotation of patterns is also considered.						1. Use hierarchical representation. Offset = 0: fully hierarchy; offset!=0 two-level 2. bug : Duplicated cell definition in out CIF file; representation might be incorrect 3. Output CIF not contain "Call Symbol" for cell instances in top level - might affect the test result 4. For offset!=0 cases, the implementation in the program seems not completed.					