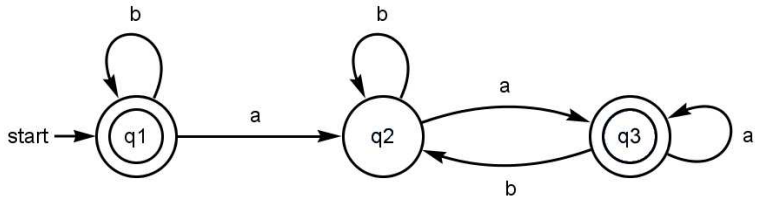
Umwandlung eines DEA in einen Regulären Ausdruck:



$$R_{ij}^{k} = R_{ij}^{k-1} \cup R_{ik}^{k-1}(R_{kk}^{k-1})^* R_{kj}^{k-1}$$
$$L(M) = \cup R_{1j}^{n}, \forall s_j \in F$$

k=0:

	1	2	3
1	ε|b	a	
2		ε|b	a
3		b	ε|a

k=1:

	1	2	3
1	(ε|b) | (ε|b) (ε|b)* (ε|b) = b*	(a) | (ε|b) (ε|b)* (a) = b*a	
2		ε|b	a
3		b	ε|a

k=2:

	1	2	3
1	b*	(b*a) | (b*a) (ε|b)* (ε|b) = b*ab*	(b*a) (ε|b)* (a) = b*ab*a
2		(ε|b) | (ε|b) (ε|b)* (ε|b) = b*	(a) | (ε|b) (ε|b)* (a) = a|b*a
3		(b) | (b) (ε|b)* (ε|b) = bb*	(ε|a) | (b) (ε|b)* (a) = ε|a|bb*a

k=3:

	1	2	3
1	b*	(b*ab*) | (b*ab*a) (ε|a|bb*a)* (bb*)	(b*ab*a) | (b*ab*a) (ε|a|bb*a)* (ε|a|bb*a) = b*ab*a(a|bb*a)*
2		(b*) | (a|b*a) (ε|a|bb*a)* (bb*)	(a|b*a) | (a | b*a) (ε|a|bb*a)* (ε|a|bb*a) = (a|b*a)(a|bb*a)*
3		(bb*) | (ε|a|bb*a) (ε|a|bb*a)* (bb*) = (a|bb*a)*bb*	(ε|a|bb*a) | (ε|a|bb*a) (ε|a|bb*a)* (ε|a|bb*a) = (a|bb*a)*

$$L(M) = b^* \mid b^*ab^*a(a \mid bb^*a)^*$$