

## Esquema de Fragmentación

| Nombre del fragmento      | Expresión del fragmento  | Ubicación (N1/N2) |
|---------------------------|--|-------------------|
| F_aalm_suscriptor_1       | $\pi_{\text{suscriptor\_id}, \text{num\_tarjeta}} (\text{suscriptor})$   | N1                |
| F_aalm_suscriptor_2'      | $\pi_{\text{suscriptor\_id}, \text{nombre}, \text{Ap\_pat}, \text{Ap\_mat}, \text{fecha\_inscripción}, \text{pais\_id}} (\text{suscriptor})$ | N1                |
| F_aalm_suscriptor_2       | $F\_aalm\_suscriptor\_2' \bowtie_{\text{pais\_id}} F\_aalm\_pais\_1$   | N1                |
| F_aalm_suscriptor_3'      | $F\_aalm\_suscriptor\_2' \bowtie_{\text{pais\_id}} F\_aalm\_pais\_2$   | N1                |
| F_aalm_suscriptor_3       | $\sigma_{\text{substr}(\text{Ap\_pat}, 1, 1) \text{ between 'A' and 'N'}} (F\_aalm\_suscriptor\_3')$   | N1                |
| F_aalm_suscriptor_4       | $\sigma_{\text{substr}(\text{Ap\_pat}, 1, 1) \text{ between 'M' and 'Z'}} (F\_aalm\_suscriptor\_3')$   | N2                |
| F_aalm_pais_1             | $\sigma_{\text{region\_economica} = 'A'} (\text{Pais})$  | N2                |
| F_aalm_pais_2             | $\sigma_{\text{region\_economica} = 'B'} (\text{Pais})$  | N2                |
| F_aalm_articulo_1         | $\pi_{\text{articulo\_id}, \text{pdf}} (\text{articulo})$  | N2                |
| F_aalm_articulo_2         | $\pi_{\text{articulo\_id}, \text{titulo}, \text{resumen}, \text{texto}} (\text{articulo})$   | N1                |
| F_aalm_revista_1          | $\sigma_{\text{to\_der}(\text{fecha\_publicación}, 'mm')} \text{ IN } ('01', '02', '03', '04', '05', '06') (\text{revista})$                 | N1                |
| F_aalm_revista_2          | $\sigma_{\text{to\_der}(\text{fecha\_publicación}, 'mm')} \text{ IN } ('07', '08', '09', '10', '11', '12') (\text{revista})$                 | N2                |
| F_aalm_articulo_revista_1 | $\text{Articulo\_revista} \bowtie_{\text{revista\_id}} F\_aalm\_revista\_1$  | N1                |
| F_aalm_articulo_revista_2 | $\text{Articulo\_revista} \bowtie_{\text{revista\_id}} F\_aalm\_revista\_2$  | N2                |
| F_aalm_pago_1             | $\sigma_{\text{num\_pago} \leq 60} (\text{pago})$  | N1                |
| F_aalm_pago_2             | $\sigma_{\text{num\_pago} > 60} (\text{pago})$   | N2                |

## Expresiones de reconstrucción

| Nombre global de la tabla | Expresión de reconstrucción con álgebra relacional  |
|---------------------------|---|
| Suscriptor                | $F\_aalm\_suscriptor\_1 \bowtie (F\_aalm\_suscriptor\_2 \cup F\_aalm\_suscriptor\_3 \cup F\_aalm\_suscriptor\_4)$ |
| Pais                      | $F\_aalm\_pais\_1 \cup F\_aalm\_pais\_2$  |
| Articulo                  | $F\_aalm\_articulo\_1 \bowtie F\_aalm\_articulo\_2$   |
| Revista                   | $F\_aalm\_revista\_1 \cup F\_aalm\_revista\_2$  |
| Articulo-Revista          | $F\_aalm\_articulo\_revista\_1 \cup F\_aalm\_articulo\_revista\_2$  |
| Pago                      | $F\_aalm\_pago\_1 \cup F\_aalm\_pago\_2$  |